



*The Best
Gun Going...*

Available at
Ed Harf's Gun Shop
SUNOCO SERVICE STATION
ROUTE No. 15
COCOCTON, NEW YORK

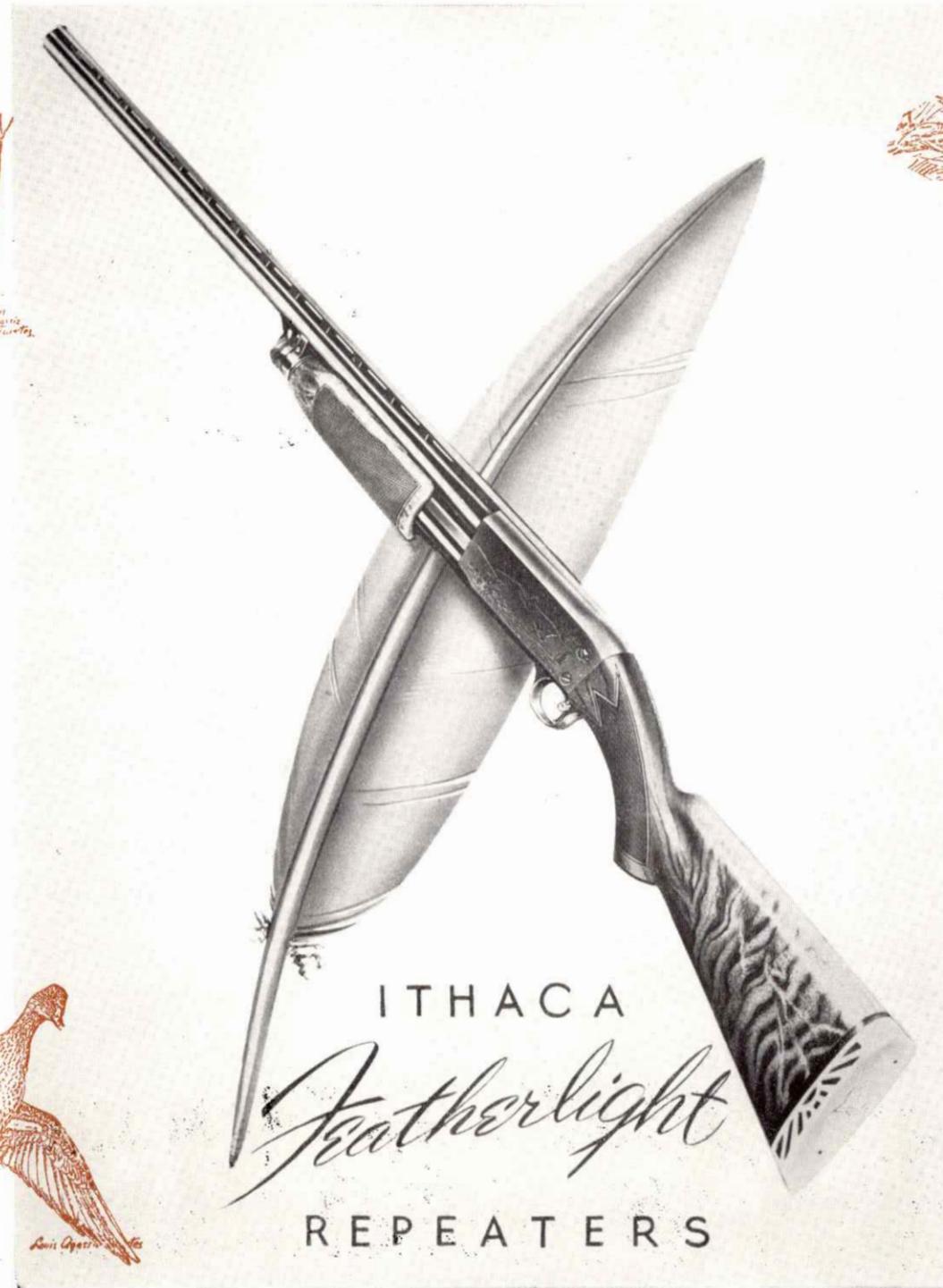
1960

(All prices subject to change without notice)

... **ITHACA** Featherlight **REPEATERS!**

ITHACA X-5 LIGHTNING .22 RIFLES!

Available at
Ed Hart's Gun Shop
SUNOCO SERVICE STATION
ROUTE No. 15
COHOCTON, NEW YORK



Water Over the Dam . . .

Once upon a time there lived not two, but five Smith Brothers in a little hamlet near Ithaca, New York by the name of Lisle, New York. One of the brothers, L. C. Smith, left Lisle and went to Syracuse, where he started the L. C. Smith Typewriter Company. At the same time there lived in Brooktondale, another little settlement near Ithaca, two fellows interested in making guns, Henry A. Baker and Robert Edwards. They used to make a few rifles for the Union Army during the Civil War. Baker became interested in trying to make a shotgun, and designed one. Having known the Smith Brothers, he went to Syracuse and sold his idea to L. C. Smith, and they went into partnership in gun making. That gun was not a very good one, and they had a lot of trouble with it. A few years later they discarded that gun and adopted a new design, the brain child of a man named Alexander W. Brown. It became the L. C. Smith Gun which they put on the market. It was one of the best double guns ever made. Baker left Syracuse at that time, returning to Brooktondale. L. H. Smith, one of the other brothers, who had also drifted up to Syracuse and joined forces with L. C. Smith, also returned to Lisle. Baker worked up another double gun design and interested L. H. Smith in it. They came by horse and buggy to Ithaca and interested two Ithacans, J. H. VanNatta and his brother-in-law Dwight McIntyre, in putting up money for the new venture. Baker had no money, but contributed his design and patents. George Livermore (also from Lisle) was with L. C. Smith in Syracuse in the typewriting business. He became interested in the Ithaca venture, and moved there buying out VanNatta's interest. Then the partnership consisted of Baker, McIntyre, L. H. Smith and George Livermore, each having a fourth interest. Baker, who had designed the gun, had agreed to sign his patents over to the partnership, but had never done so. He had a brother in Batavia, New York, who was a doctor, and he conceived the idea of taking his patents and design and going there in partnership with his brother. That would have left the Ithaca partnership with nothing to build. There was a lawsuit over that, and the result was that the court compelled Baker to sign his patents over to the partnership, and give up his part of it. The



Ithaca Gun Company about 1882

original start of the Ithaca Gun Company, as described, took place way back in the year 1880. It was many years before they could turn out as many as 60 guns a week. The original operation took place in a little wooden building situated on the steep gorge of Fall Creek in Ithaca, which was purchased from Ezra Cornell (founder of Cornell University) who had built it as a mill.

They had only three or four machines which they had to make, not having any money to buy that sort of thing. The little wooden building was lighted with oil lamps.

The Baker-designed double gun that was first made was a hammer gun. An Ithaca Gun Maker by the name of Fred Crass worked up a "hammerless" gun, and they made that. They went from one design to another, each gun getting a little bit better than the last one.

Robert Edwards, who had started in Brooktondale with Baker joined Ithaca and specialized in barrel boring. He eventually gained the reputation of being the best shotgun barrel borer in the country, and was known throughout the shooting world as "Uncle Bob" Edwards. He had white hair and a long, flowing white beard.

One of the partners, McIntyre, died about 1893. George Livermore and L. H. Smith bought out his interest, leaving two of them as equal

partners. About 1895 a fellow living in Ithaca had an idea about a typewriter, and L. H. Smith and George Livermore worked with him and started a typewriter company in connection with the Ithaca Gun Company. They got in production somewhat, calling it the "Peerless", and then sold out the typewriter business for a price which enabled them to buy some new machines and do some tooling up for their gun building. That was really when they began to get into the gun business to any appreciable extent. In 1904 they became incorporated under New York State Laws.

George Livermore, who lived to be 104 years old, became known to every one far and wide as "Uncle George". Those were the by-gone days when wages were small compared to today. Once one of the workers, John Hoyle, came to Uncle George to see about a raise. Uncle George said: "How much are you getting?" John said: "75c a day." Uncle George said: "My God, you're getting a man's wages now, and you're only a boy!"

Ithaca continued making double guns until the year 1948 when they were discontinued. At various times in its long-ago history, Ithaca bought out several gun plants, including the Syracuse Arms Company, the Lefever Arms Company, the Union Firearms Company, the Wilkes-Barre Gun Company, and others.

During World War II Ithaca made the Colt-type .45 caliber Semi-Automatic Pistol for the Military Services. Following this the M-6 Survival Weapon was manufactured for the Air Force. Then Ithaca made the M3A1 .45 caliber Sub-machine Gun for the Army.

From all the correspondence that came in over the years, Ithaca noticed that one theme was in heavy evidence: when describing the gun wanted, the shooters invariably wanted lighter weight. This fact led the lads to present to the muscle-weary nimrod the Model 37 FEATHERLIGHT® Repeater. This lightweight hit the eager market in the year of our Lord 1937. For the first time a repeater was available weighing in as light as 5-¾ lbs. in 20 gauge, 6 lbs. in 16 gauge, and 6-½ lbs. in 12 gauge. The shooting fraternity went for this like a conventioneer for a blonde, and Ithaca was on the way!

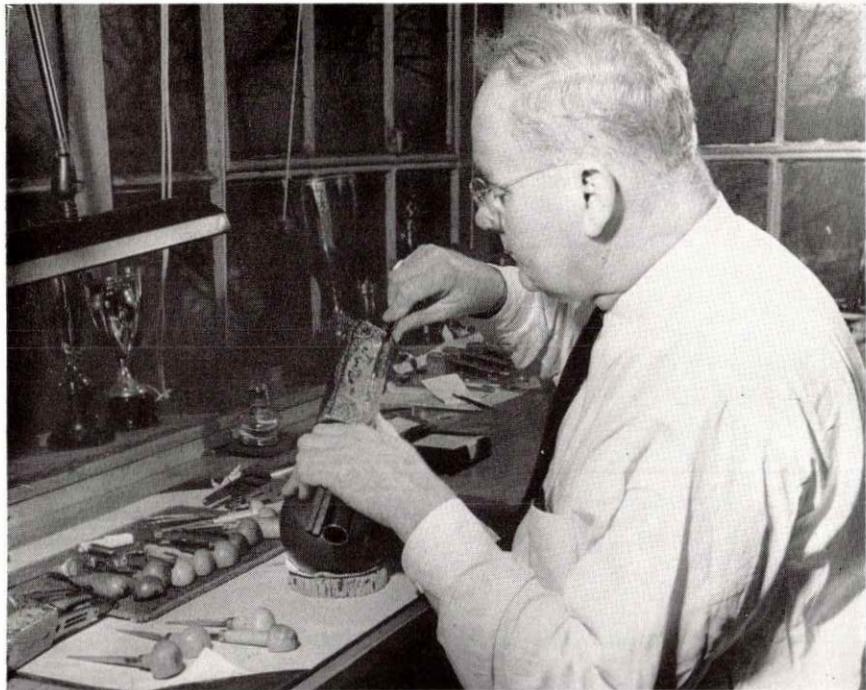
Funny thing about the FEATHERLIGHT®, despite its lack of non-

necessary heft, the gun doesn't employ the use of the so-called "alloy" type of lightweight metals. The Model 37 is made out of good, safe solid steel, and has a good big safety margin of protection for the shooter. Another exclusive for the happy customer is the fact it is the only repeater on the market that has bottom ejection. The shooter is not only buying additional insurance for his shekels, but in case he is a portside pointer he has a gun that protects his face from the flying ejected shell. Still another dividend for Ithaca owners is the amazing Ithaca Raybar® Front Sight, at no extra charge on all new Ithacas. You will find its fantastic performance described on another page.

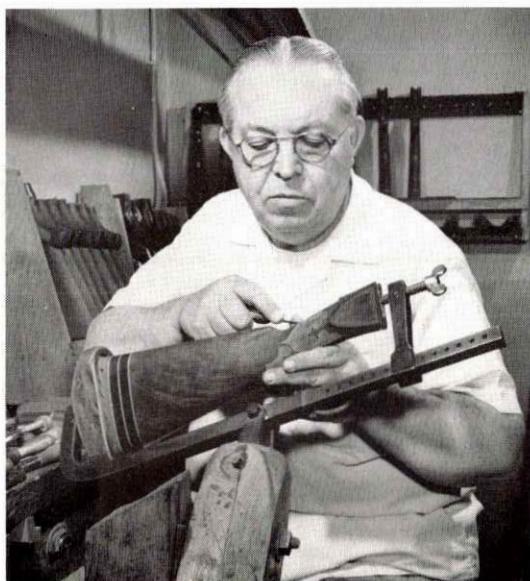
In 1958 the Ithaca Gun Company entered the rifle field for the first time in its history, offering the X-5 LIGHTNING .22 caliber Rifle first in clip magazine style, and then in 1959 in tubular magazine style. Another newcomer for 1959 was the DEERSLAYER® slug shooting shotgun with a specially bored barrel that handles rifled slugs with almost telescope accuracy.

Ithaca from time to time gets some rare letters from shooters. One chap from the mountain regions wrote in saying he had an Ithaca FEATHERLIGHT® and on foggy or rainy days he could bag all the squirrels he drew bead on, but on clear sunshiny days he couldn't hit anything at all and what the h - ll was the matter with his gun? Another shooter in all seriousness wrote in saying that his FEATHERLIGHT® functioned perfectly in every way except when it was held in an upsidedown position, which was the way he customarily shot it! Perhaps the bell-ringer of them all was the chap who answered an Ithaca ad which wound up with the offer "send 6c in stamps for catalog with gun, dog, and load information". This fellow sent in his 6c in stamps and said he was sure there was a "ketch" in it but he was now waiting for the arrival of the catalog, the gun, the dog, and the load information, and went on to describe just the kind of gun and dog that he wanted. The only thing that worried him was who was going to have to pay the freight on the outfit!

Incidentally, boys, Ithaca is selling through Dealers only. If you haven't got a Dealer contact, write the Ithaca Gun Company, Inc., Ithaca, N. Y. and ask where your nearest ones are located. We are a friendly bunch up here in Ithaca and will do all we can to lend you a hand whether you are a bigtime operator or a one-man band.



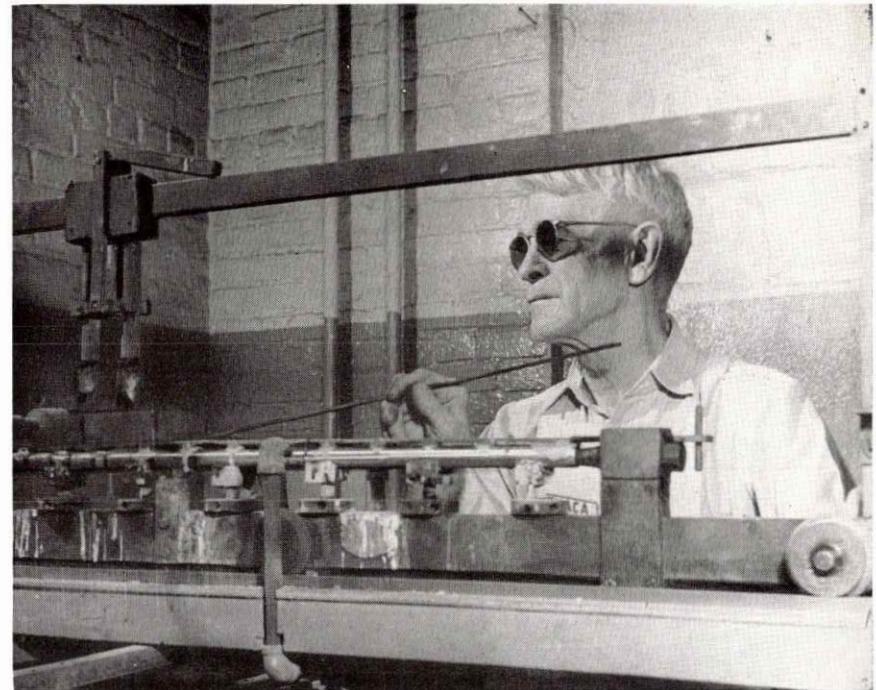
Master Engraver at work on an Ithaca \$2,500.00 Grade Repeater. Six to eight weeks work is involved in hand-engraving, gold embossing, and carefully working yellow and green gold, silver, and platinum into the artistic game scenes and designs of just one such gun.



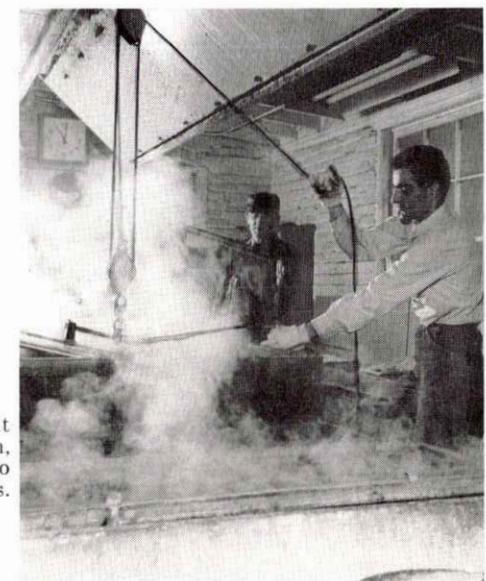
Careful, painstaking hand-work goes into the checker-ing of an Ithaca Single Barrel Trap Gun.

A LONG-TIME SHOOTER AND SPORTSMAN WHO VISITED OUR PLANT WROTE US AFTERWARDS AS FOLLOWS:

"Who knows but that it may be the same Magic of the old Ithaca Hills that goes to make the shotgun of the same name the fine piece that it is and its outstanding excellence in performance. The tiny unseen dwarfish little 'men' that go to work long after the shop is closed, in the shadows of the Ithaca Moonlight, add a touch here and a tap there to iron out the rough spots or flaws that the tired gunmaker didn't see in his constant effort to create a masterpiece. The Ithaca Gun is about the only one left in America that is still the work of the craftsman instead of a mechanical robot."



Craftsman installing a ventilated rib on an Ithaca Model 37T Target Grade Repeater barrel.



Not the Devil's Cauldron, but bluing vats in which the rich, lustrous finish is imparted to Ithaca Gun metal parts.

NEW ITHACA X-5 LIGHTNING!

.22 LONG RIFLE

SEMI-AUTOMATIC



Simple, rugged parts, few in number.
A beautifully crafted rifle by the makers
of the famous Ithaca Featherlight
Repeating Shotguns.

A He-Man's .22
BUILT FOR USE AND ABUSE!

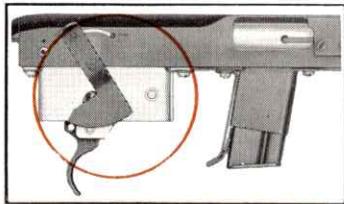


Fig. No. 1

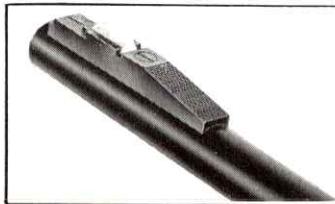


Fig. No. 2

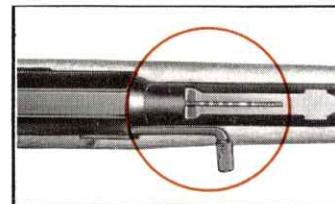


Fig. No. 3

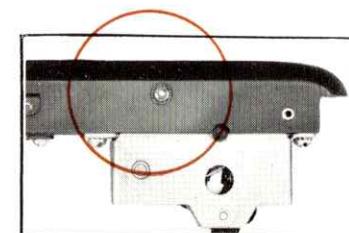


Fig. No. 4

BARREL — 22" special blued barrel steel, with Ithaca-crafted rifling for pin point shooting. Chambered and rifled for .22 cal. Long Rifle cartridge only.

MAGAZINE — For clip type, 7 shot clip supplied; 12 shot clips available at slight extra cost. (See below). For tubular type, tube has 16 shot capacity.

STOCK — Genuine walnut. Clip type has grooved forend. Tubular type has beavertail shaped forend. Both give perfect balance and smooth handling. Rich luster-sheen finish. Butt plate. Pistol grip.

WEIGHT — About 6 lbs. Just right for a steady, non-wavering, tack-driving hold. Length over all 40½".

TAKEDOWN — Most simple. Only one screw to loosen. No special tools needed. When you take this gun

down you will find it is beautifully built inside and outside.

(See illustrations above)

Fig. 1. SAFETY — Double Safe Safety . . . locks the trigger and blocks the hammer. The really safe safety. Built-in peace of mind for the shooter. "Safe" and "Fire" positions clearly marked.

Fig. 2. SIGHTS — Amazing new Ithaca RAYBAR® Front Sight. Gathers light rays for fantastic hair-splitting aiming ability. Only rifle so equipped. Also — extra black finish Ithaca RAYBAR® Sight furnished with each gun for lighting conditions where you prefer a black sight. Snap in, snap out, whichever you want in a matter of seconds — no tools needed. "V" type sporting rear sight. Receiver grooved for snap-on mount for telescope use.

Fig. 3. BOLT — Similar to famous military bolt; free-working and non-fouling. Simplest and most positive ejector. Non-shutting charging handle. Handiest and easiest to operate.

Fig. 4. BOLT HOLD OPEN — Easy to operate, sturdy, sure, positive in action. An additional safety feature and makes barrel cleaning much easier.

RETAIL PRICE, Clip Type, incl'dg excise tax	39.95
EXTRA CLIPS: 7-Shot	2.00
EXTRA CLIPS: 12-Shot	2.50
RETAIL PRICE, Tubular Type, including excise tax	49.95
EXTRA RAYBAR® SIGHTS red or black for either model	.25

THE DEERSLAYER®—World's Most Accurate Slug-Shooting Shotgun!



Model 37 DEERSLAYER®

Model 37 Deluxe DEERSLAYER®

The "Deerslayer"® Shotgun

Years of research by Ithaca Engineers have produced something NEW and exciting for the deer hunter. This new gun features:

1. Featherlight weight, but extra strength where needed.
2. Super-accurate barrel bored especially for today's factory loaded rifled slugs. THIS IS NEW — it is not standard boring. IT INCREASES ACCURACY. It is factory sighted for 40 yards with no change needed for 100 yards. Rear sight adjustable for elevation. 2 inch 5-shot groups are common at 40 yards; 9 inch groups at 100 yards. Handles shot loads well, giving open type pattern of Improved Cylinder percentage. Breaking 25's at skeet made easy.
3. Bottom ejection. Action not exposed to rain, dirt, ice or snow.
4. Amazing new Ithaca RAYBAR® Rifle Front Sight. Gathers light rays for fantastic hair-splitting aiming ability. Also—extra black finish Ithaca RAYBAR® Sight furnished with each gun for lighting conditions where you prefer a black sight. Snap in, snap out, whichever you want in a matter of seconds—no tools needed. "V" type sporting rear sight. Both front and rear sights fitted to barrel.
5. Barrel lug is drilled and tapped for sling swivel. Sling swivels fore and aft furnished with gun.

6. Is a perfect "combination" gun that can be used for shooting rabbits, quail, grouse, doves, woodcock, etc., and by merely shifting ammunition to rifled slugs is ideal for deer, bear, wild boar, peccary, woodchucks, etc.
7. Furnished in 12 gauge, 16 gauge, and 20 gauge with 26 inch barrel only. Model 37 Deluxe has grooved Beavertail Forend, hand checkered stock and pistol grip cap.

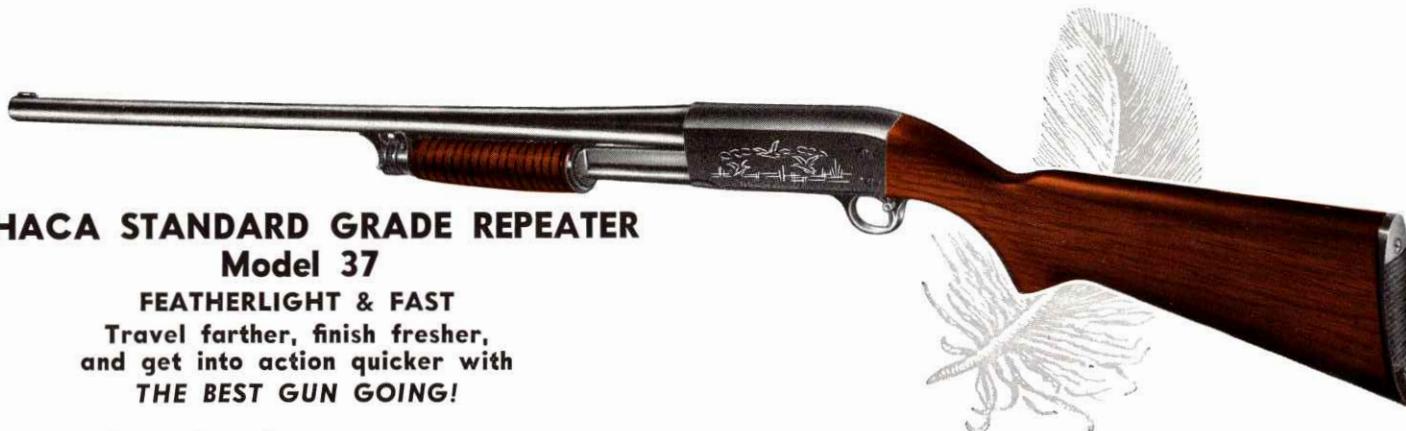
RETAIL PRICES including Excise Tax

MODEL 37 Deerslayer®—12, 16, 20 gauge	107.95
MODEL 37 Deluxe Deerslayer®—12, 16, 20 gauge	114.95
MODEL 37 Super Deluxe Deerslayer® (not illustrated; same as Model 37 Deluxe plus Williams Receiver Peep Sight, Ithaca Recoil Pad, and Leather Sling) 12, 16, 20 gauge ...	124.95

Deerslayer® Barrel For Your Present Ithaca Repeater

Extra barrels must be fitted at factory. Price includes fitting charges. Barrels can be fitted to any Model 37, 37 Deluxe, 37R, 37R Deluxe or 37T. We need the entire gun, including present barrel, to fit extra barrel. Price \$46.95.

THE FAMOUS ITHACA MODEL 37 FEATHERLIGHT®



ITHACA STANDARD GRADE REPEATER Model 37

FEATHERLIGHT & FAST
Travel farther, finish fresher,
and get into action quicker with
THE BEST GUN GOING!

All Ithaca Repeaters have these features:

- Amazing new Ithaca RAYBAR® Front Sight • Quick takedown — no tools needed
- Short oil-smooth forend stroke • Shells fed in straight line into chamber
- Easy action release for removing shells • Handy crossbolt safety—can be furnished reversed for left-handed shooter • Receiver is solid top and sides for safety
- Full pistol grip • Bottom ejection — protects shooter's face and arm and the man beside you from burned powder residue—gas blow-back. It's the safest shotgun for the left-handed shooter. Cannot clog action from rain, sleet, snow or dirt. Bottom ejection gives you protected action
- Plug supplied to conform with 3-shot Migratory Bird Law • Waterfowl scene on one side of receiver shows three ducks in natural setting. The other side has pleasing scene featuring a bird dog with two rising Ringneck Pheasants.

Model 37	12 Ga.	16 Ga.	20 Ga.
Barrel lengths inches	26, 28, 30	26, 28	26, 28
Approximate Weight	6½ lbs.	6 lbs.	5¾ lbs.
Choke for all gauges	Full, Modified, Improved Cylinder Choke (Specify which wanted)		
Chamber length	2¾" for all gauges		
Measurements	Drop at comb 1½"—Drop at heel 2¾". Stock length 14"		

RETAIL PRICES including excise tax

MODEL 37	94.95
Special Stock Specifications	18.95
Monte Carlo, Cheekpiece, Offset, or Unusual Stock	47.95
Ithaca Recoil Pad	7.50
Extra Barrel (must be fitted at Factory) ..	36.95



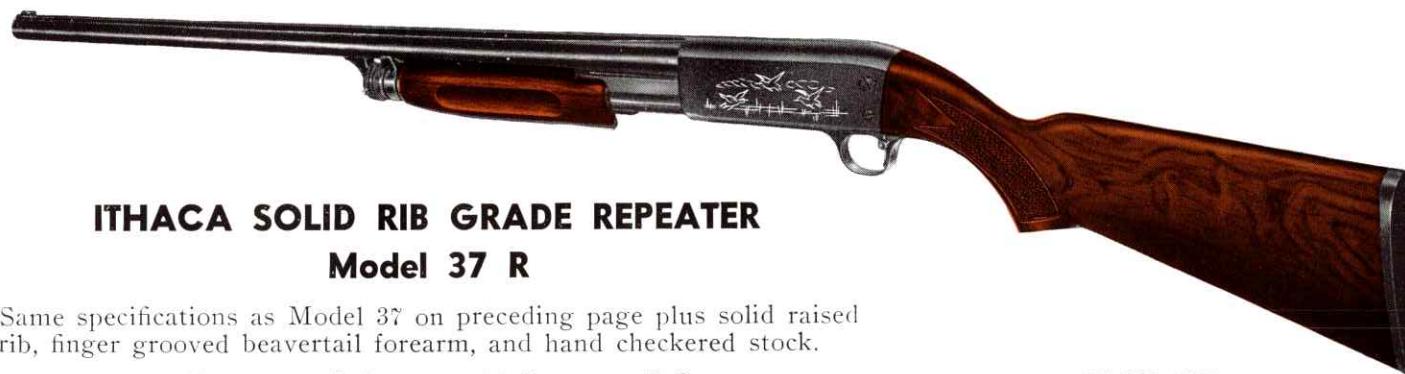
ITHACA DELUXE STANDARD GRADE REPEATER Model 37 Deluxe

Same specifications as Model 37 shown above plus finger grooved beavertail forearm, hand checkered stock, and pistol grip cap.

Approximate Weights: 12 Ga. 16 Ga. 20 Ga.
 6¾ lbs. 6½ lbs. 6 lbs.

MODEL 37 DELUXE

RETAIL PRICE including excise tax 99.95
Extras and Specials same as Model 37



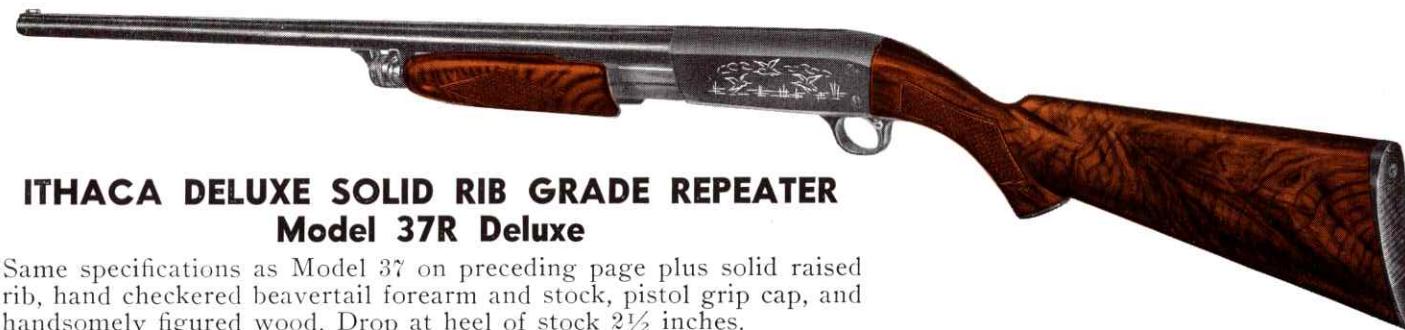
ITHACA SOLID RIB GRADE REPEATER
Model 37 R

Same specifications as Model 37 on preceding page plus solid raised rib, finger grooved beavertail forearm, and hand checkered stock.

Approximate Weights: 12 Ga. 16 Ga. 20 Ga.
 $\frac{7}{2}$ lbs. $\frac{6\frac{3}{4}}{2}$ lbs. $\frac{6\frac{1}{4}}{2}$ lbs.

MODEL 37R

RETAIL PRICE including excise tax 114.95
 EXTRA BARREL (must be fitted at Factory) 52.95
 Other Extras and Specials same as Model 37



ITHACA DELUXE SOLID RIB GRADE REPEATER
Model 37R Deluxe

Same specifications as Model 37 on preceding page plus solid raised rib, hand checkered beavertail forearm and stock, pistol grip cap, and handsomely figured wood. Drop at heel of stock $2\frac{1}{2}$ inches.

Approximate Weights: 12 Ga. 16 Ga. 20 Ga.
 $\frac{7}{2}$ lbs. $\frac{6\frac{3}{4}}{2}$ lbs. $\frac{6\frac{1}{4}}{2}$ lbs.

MODEL 37R DELUXE

RETAIL PRICE including excise tax 139.95
 Extras and Specials same as Model 37R



ITHACA TARGET GRADE REPEATER **Model 37T**

Same specifications as Model 37 on preceding page plus ventilated rib, fully hand checkered beavertail forearm and stock, pistol grip cap, finely figured wood. Choice of stocks, either skeet type 14 inch with $2\frac{1}{2}$ inch drop (no recoil pad) or trap type $14\frac{1}{2}$ inch with $1\frac{1}{8}$ inch drop and Ithaca Recoil Pad.

Approximate Weights: 12 Ga. 16 Ga. 20 Ga.
 $\frac{7\frac{3}{4}}{2}$ lbs. 7 lbs. $\frac{6\frac{3}{4}}{2}$ lbs.

MODEL 37T

RETAIL PRICE including excise tax 224.95
 EXTRA BARREL (must be fitted at Factory) 73.95
 Other Extras and Specials same as Model 37

The FABULOUS
ITHACA
\$2500.00 GRADE REPEATER



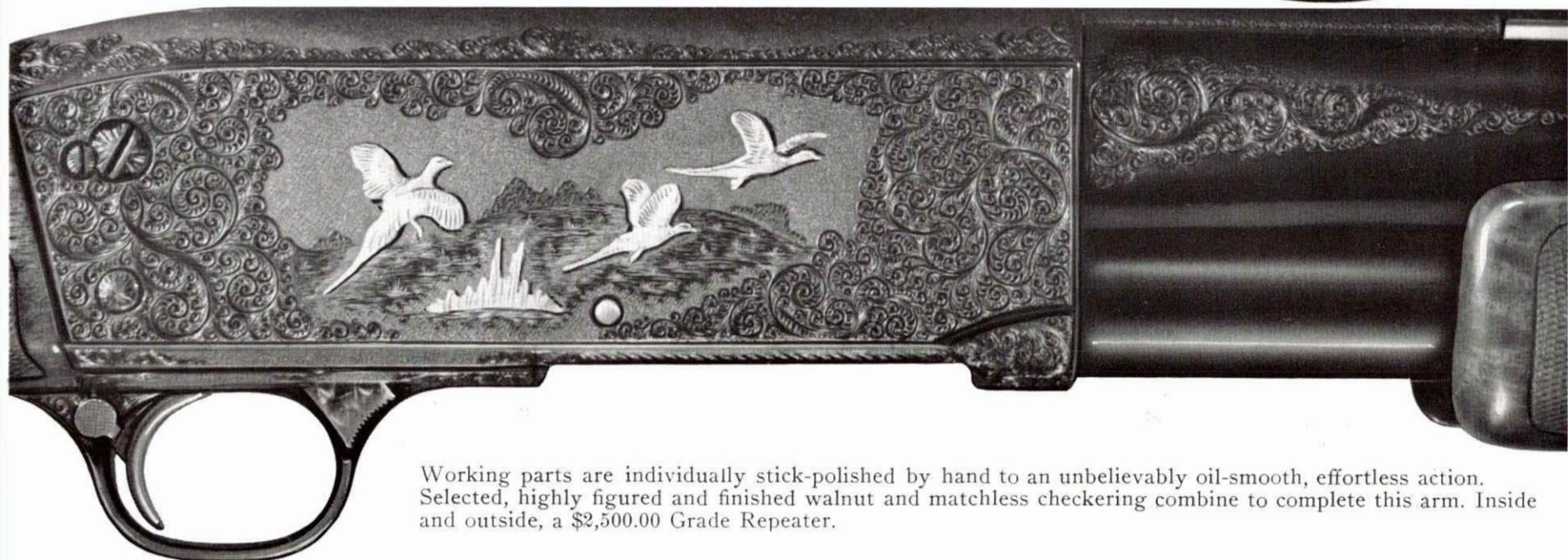
\$2,500.00 FOR A SHOTGUN! That's a startler at first sight, but when you look over the Ithaca \$2,500.00 Grade Repeater, you can easily appreciate the cost. The outside alone carries eight weeks' work of the finest engraving and gold embossing imaginable as well as matchless checkering of the highest grade, and the inside presents every individual part hand-polished to an ice-slick surface. Needless to say, the finest steels and wood are crafted into the absolute tops in gunnery.

This is the ultimate in ownership and the finest in gifts. On this and the following page Ithaca presents photographically to the extraordinary gun lover the craftsman-gunsmith's finest efforts, the \$2,500.00 Grade Repeater!

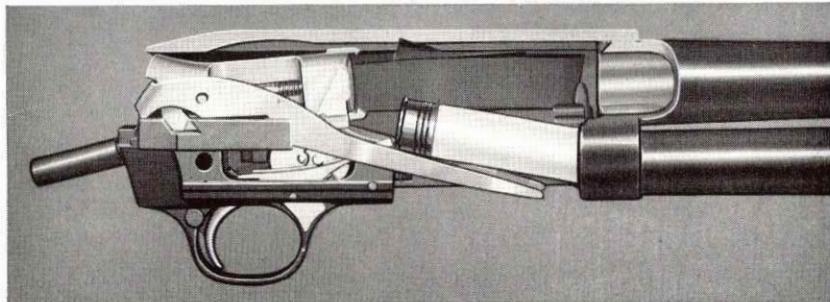


\$2,500.00 GRADE ITHACA REPEATER

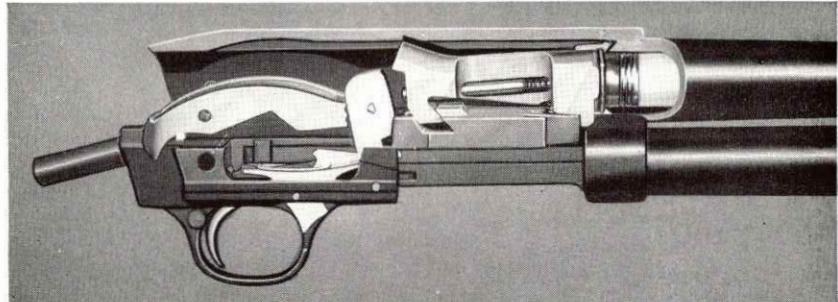
One example of the superior type of workmanship, artistry, and good taste available in Ithaca Guns. The custom engraving shown is entirely hand worked even to the fine scroll and the stippling used as background for the game scenes and as anti-glare on the top of the receiver. Pheasants, ducks, and cat-tails are executed in gold and raised from the background in bas-relief.



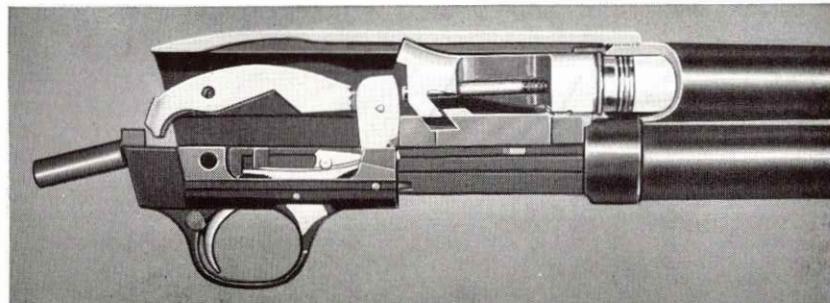
Working parts are individually stick-polished by hand to an unbelievably oil-smooth, effortless action. Selected, highly figured and finished walnut and matchless checkering combine to complete this arm. Inside and outside, a \$2,500.00 Grade Repeater.



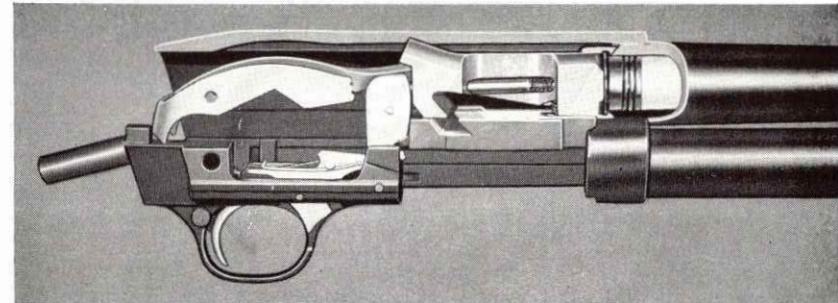
Cut-away view showing action of the Ithaca FEATHERLIGHT® Repeater just as the shell leaves the magazine tube and is picked up by the carrier.



In this view the shell has been raised by the carrier and pushed into the chamber by the breech block. Note that the back end of the breech block has already started to raise into the "well" in the top of the receiver although the hammer is still mechanically blocked from being able to touch the firing pin.



In this view note that the breech block is completely in the retaining "well" in the top of the receiver and still the hammer is mechanically blocked from being able to touch the firing pin. The gun cannot fire unless the breech block is seated in the "well" (a safety factor).

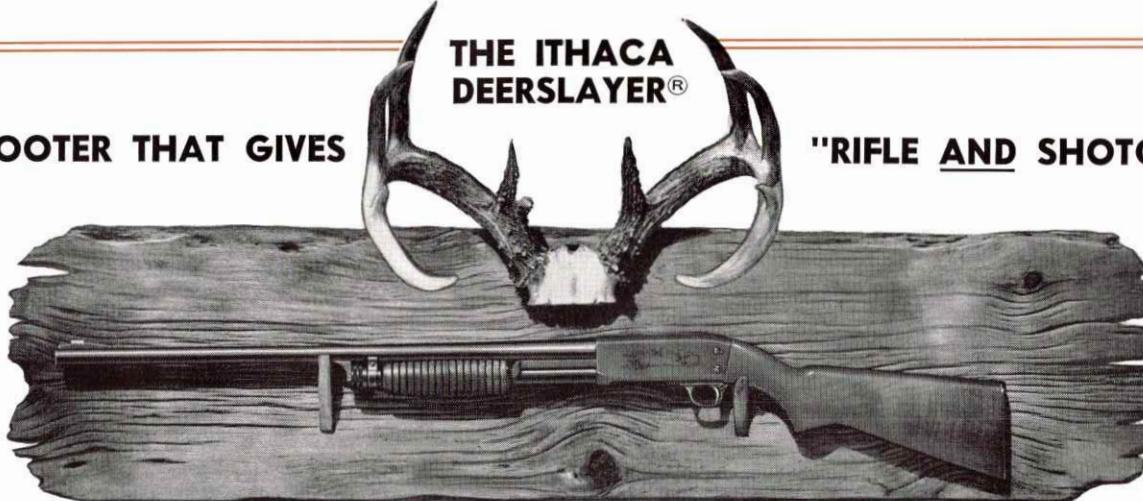


This shows the gun in final firing position with the breech block in the "well" and the slide (below the breech block) now enabling the hammer to strike the firing pin.

THE ITHACA DEERSAYER®

THE SLUG SHOOTER THAT GIVES

"RIFLE AND SHOTGUN RESULTS"



By Ed Thompson, Head of Ithaca Service Department

The birth of the Ithaca DEERSAYER® was a trophy buck before the DEERSAYER® was even contemplated. This buck wasn't even killed for a trophy. A hunter was after meat, but he didn't get to eat it. The foxes and other varmints did.

One night about ten years ago our neighbor dropped in to go hunting with us. For two days he had been trying to connect with the biggest deer he had ever seen. He said: "Yesterday I got a shot at him at about 100 yards right in the open. I knew it was too far away, but I couldn't resist. Missed him clean, too, and without any snow I couldn't track him, but I know he is still there."

Dawn the next morning found our neighbor and three more of us on top of a ridge just outside Ithaca in a stretch of country ten miles long by four or five miles wide, as beautiful and rough to hunt as white-tail country anywhere. Part of it is virgin pine of tremendous size, still standing because the old timers simply couldn't get it out because of the cliffs and rugged terrain.

It was in one of those stands of pine, on a thick carpet of pine needles, that I came upon the trophy buck, all hunkered up as though he had settled down ready to spring up and be away if he had to.

I figured he had settled down there shortly after our neighbor had "missed him clean". From my short distance he looked alive and ready to go, but then I noticed his nose was down between his front hooves, and all 11 points of that big rocking-chair rack were pointing straight ahead. A closer look showed that he was "dead as a door nail", and the slug shot had connected, but way back and low on the paunch.

The other hunters were gathered, and the fellow who had shot at him the day before knew it was his buck, and said: "I wish I had missed him clean". This got the writer thinking and asked the shooter to let us target his gun at a mark, and we set up an old bucket on a stump 50 yards away (he took his shot at this deer at about 100 yards). All four of us targeted that gun with the slug loads, and all four of us shot about a foot-and-a-half to the right. That's when I said, "Now maybe you boys understand why my son and I have put rifle sights on our shotguns, and even so, we have come to the conclusion that the limit of range of a regular shotgun with rifled slugs is about 75 yards for a sure kill".

Probably any one who has hunted deer has, at one time or another, found dead and spoiled deer that have been poorly shot. This happens in rifle country as well as where deer are hunted with shotguns.

I took my thinking back to the Ithaca Gun Company when I reported for

work the next morning, and we began a project to develop the ideal slug shooting shotgun. Previously rifled slug loads had been developed to shoot in a shotgun. NOW we were going to start with the rifled slug load as produced commercially and "build a gun to fit the slug".

Barrel after barrel with every conceivable type of barrel boring was tried until eventually the Ithaca DEERSAYER® was developed. Next came tests (following our own) at an independent, unprejudiced, technical ballistical Laboratory, the H. P. White Laboratory, Bel Air, Maryland.

These tests included pressure within the barrel, velocity, and accuracy. These tests were run after the original final Ithaca development had been tested in the deer woods for six years. During this time one gun, used by three different hunters, killed fourteen deer with eleven 1-shot kills at ranges from 60 to 115 yards.

In one test at the H.P. White Laboratory, Bill Weiman of that firm fired the DEERSAYER® at 100 meters (109.4 yards) and made a target pattern using five slugs with a vertical spread of 7" and a horizontal spread of only 4 3/4". Three of the shots in this one grouped vertically 2 1/2" by 3" horizontally!

At 50 yards a 5-shot group measured vertically 1 1/2" by 1 3/4" horizontally, and four of the holes in the target cut into each other!! (Ithaca comment: For acceptable shooting of a Whitetail, it is generally considered that slugs must fall in a pattern grouping of not more than 12 inches vertically and 14 inches laterally according to most deer hunters.)

H. P. White Laboratory, in their written report to us, said: "The target reproductions included with this report actually do not give a fair picture, although they are fully as good as targets we have fired here at the Laboratory with new medium caliber hunting rifles. Based on rather extensive experience this Laboratory has had with rifled slug accuracy testing, we feel that we are qualified to say that the possible accuracy obtainable with these guns may be compared favorably to standard hunting rifles. We believe that any improvement in ammunition or shooting skill would have resulted in better targets".

The Laboratory's Bill Weiman's personal comment, after shooting the DEERSAYER® was: "If I'd had that gun in my hands last fall, a wounded deer never would have gotten back into territory where I couldn't follow him".

Burt Munhall, Manager of H. P. White Laboratory said, after looking over the targets: "In addition to the excellent carrying and handling qualities of the DEERSAYER®, this gun shoots as well as a .35 caliber deer rifle at 100 meters (109.4 yards)".

For years we have known rifled shotgun slugs pack a lot of wallop, and

ITHACA GUNS

that at 40 yards a 12 gauge slug will splinter more than a dozen $\frac{3}{4}$ inch pine boards and whistle right on.

The squirrel hunter who uses a .22 rifle on the heads of Gray Squirrels requires one minute of angle accuracy, or close to it, which means that the gun will shoot into a one inch circle at 100 yards. While this would be ideal accuracy, there are very few rifles that will do that well, and practically all of them are heavy-barrelled target rifles. (We might add that very few shooters can do it either, even though the gun may be capable.) On the other hand, a deer rifle normally considered "accurate" is a gun that will put all of its shots in an 8 inch circle at 100 yards. The Ithaca DEERSAYER® will do it!

For this type of shooting for buckskin, only the single barrel type of shotgun, which includes pumps, will handle slugs properly. The over-unders and side-by-sides just won't handle this load at any distance over 50 yards to put meat on the table.

It must be remembered that a number of factors affect targeting of any loads, including slugs. The gun is the unchangable factor. Ammunition can vary, not only from lot to lot, but from case to case, and sometimes even within the same box. In the case of the slug, because of its unique construction, you will get an occasional "flyer" which will track off course in any direction. Let's say you pattern five shots. You might or might not get a "flyer" that will pattern wide or even off the target. This is inherent in the ammunition and should be disregarded. Also remember that the shooter will occasionally pull off the target involuntarily when touching off the gun. Sometimes he is aware of it, sometimes not.

Weather can affect the flight and targeting of a load. Wind direction and velocity, including gusts, can alter the flight path after a slug has left the gun.

Keep all these factors in mind when examining results.

The average boiler room of a deer will go about 11 or 12 inches in diameter, so if you want to try your gun with a slug, set up a target about that size square and check your gun accuracy.

Most deer are killed at ranges about 40 or 50 yards, so you know that with the shotgun slug you can get your share of game. What will the slug do in brush? Charles Askins, Gun Editor and top expert, says: "I placed a target behind a dense clump of mesquite and shot at it. The 12 gauge slug proved it will mow down brush like the Grim Reaper wielding his scythe. It does not make a hoot whether the branches are directly in front of the target or midway of the range. The soft lead whittles it down and keeps right on going. Of course, any one knows you can't shoot through a couple of Pennsylvania Pines to bag your buck, but even so, this one ounce rifled slug turns in a highly satisfactory performance."

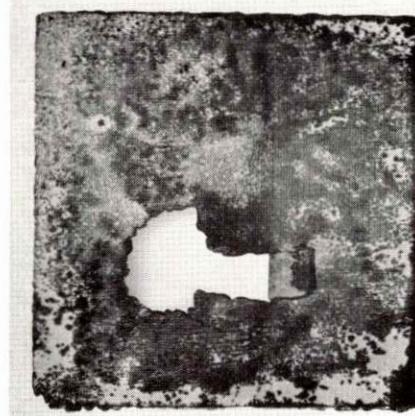
Rifled slugs have been found quite stable in flight up to 300 yards, going through a paper target at great distances nose foremost. Exactly how far it will travel before it tumbles, we do not know, but evidence so far seems to prove it will generally go to the maximum ranges without "keyholing". The hollow base simply can't get ahead of the weighty nose, until it is slowed down to walking speed.

You will find after firing some practice rounds (as you would to sight in a rifle) that you will get top results at ranges up to 100 yards and over to bring home your buck with your Ithaca DEERSAYER®.

The very fast handling qualities of the Ithaca DEERSAYER®, plus the fact that you can carry one in the deer woods all day long, make it a very deadly deer gun when used with slugs, and these qualities are appreciated by hunters who don't find enough time to "train" for the deer woods.

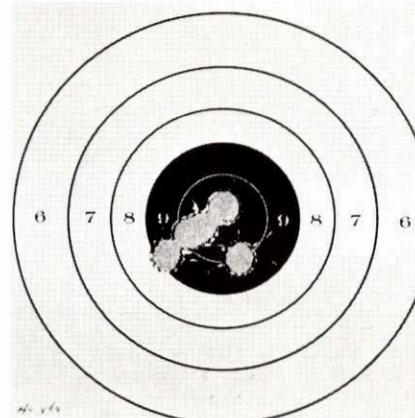
The Ithaca DEERSAYER® is equally good for bear, moose, wild pigs, and, because of its accuracy, even woodchucks. Since it handles regular shot shells well up to about 35 yards, it is also an excellent small game gun and all the shooter has to do is merely switch from rifled slug loads to regular shot shell loads to have the best "combination" gun ever built. We have also been told by skeet shooters that the DEERSAYER® boring makes "25's" easy. The Ithaca DEERSAYER® will put more trophies on the wall AND more meat on the table!

Two slugs through the same hole at 40 yards! Bull's-eye is only $3\frac{1}{8}$ inches square!



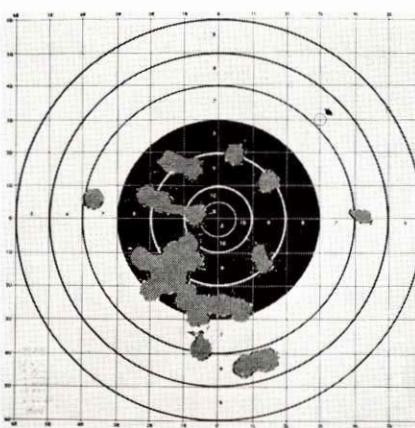
5 slugs shot at 40 yards with an Ithaca DEERSAYER®. This is a $1\frac{3}{4}$ inch group!

This target was not shot from a machine rest and was not shot by an expert "target" shooter.



25 slugs shot at 40 yards with an Ithaca DEERSAYER®. Five each of 5 different brands of slug loads were used. Bull's eye is only 6 inches in diameter! Total target is only 12 inches in diameter! The "half-hole" at "3 o'clock" is from a slug fragment that bounced back through the target from the back stop. The whole paper target is the size of the vital killing area of the average deer.

This target was not shot from a machine rest and was not shot by an expert "target" shooter.





THE CUSTOM BUILT \$2,500.00 Grade Ejector is representative of the superlative of gun making. Here is the ultimate of the craftsman's art, his finest effort, resulting in an arm that combines thoroughbred distinction and an ability to "stand the racket" well. For the man who prefers the expression of unparalleled quality in his possessions, Ithaca builds the \$2,500.00 Grade. Like a fine car, a fine horse, or a fine estate the \$2,500.00 Grade indicates an owner well conscious of the distinctive.

STOCK — The beautiful, fancy figured and richly colored walnut stock on this gun shows some of Nature's choicest handiwork.

LOCKS AND BOLTS are finished with a high mirror polish and given the most exact fitting.

FOREARM — The beavertail forearm is checkered by hand in an artistic manner to correspond with the stock; it has a horn tip inlaid in the end. This beavertail forearm is so shaped that it prevents the gun slipping back through your hand when the gun is fired; your extended hand and arm absorb the recoil and muzzle-flip; your cheek and shoulder are protected; your hand is also protected from the heat of the barrel.

ENGRAVING — If you could watch our most skillful engraver as he works patiently, carefully and with the skill of an artist, cutting away and digging out, little by little, the metal until it took the shape of a dog or gamebird, and then watch him inlay the

gold, shape and engrave it in beautiful raised bas-relief, you could better appreciate the great amount of time and skill required to do work such as this. On the right and left sides of the frame a game scene is inlaid in gold in raised bas-relief. A flying bird is inlaid in green and yellow gold and silver, in raised bas-relief on trigger plate. A game scene is inlaid in gold in raised bas-relief on the trigger guard. The frame, breech block, forearm iron, top lever, trigger plate and guard are engraved with fine delicate scroll engraving. Triple gold plated trigger, gold name plate in stock.

Specifications for the Single Trap Gun

Ithaca RAYBAR® Front Sight and Ivory Rear Sight
and Recoil Pad

Full Pistol Grip, unless otherwise ordered

30 or 32 inch barrel

Twelve gauge only

\$2,500.00 Grade, including Excise Tax 2,500.00

Special stock specifications other than standard
(14½ x 1½ x 1⅛) Extra 75.00



THIS illustration will give you but a faint idea of the beautiful finish, workmanship and material of our Custom Built No. 7 Ejector Single Barrel Trap Gun.

STOCK — Especially selected walnut with handsome grain and color; hand fitted and checkered in a very elaborate and artistic manner.

LOCK — This Single Barrel Trap Gun has the Ithaca lightning lock. A world's champion said of it, "It is faster than greased lightning." It has three lugs, two at the top and one at the bottom — a triangular form of fastening — bolted at two points.

FOREARM — The beavertail forearm, an Ithaca invention, fits the hand perfectly and keeps it away from the hot barrel. The forearm is selected, finely figured wood, beautifully checkered and finished.

RIB — The rib is ventilated to prevent heat wave annoyance, it is matted on top to prevent reflection of sun's rays, it gives a clean line of sight and it cannot shoot loose.

ENGRAVING — No picture can do justice to the beautiful engraving on this gun. Words are inadequate to describe it. The frame, guard, forearm iron, trigger plate, top lever and breech block are elaborately engraved and ornamented with oak leaf and acorn design in relief. Beautiful inlaid designs on the right and left

sides of the frame, ducks on one side and pheasants on the other. Three different colors of metal are used in inlaying the ducks and cattails — green and yellow gold and silver. A golden game scene is inlaid on the guard, an American eagle is inlaid in gold and silver on the trigger plate. The trigger is triple gold plated and hand checkered. It has a gold name plate in the stock.

Specifications for the Single Trap Gun

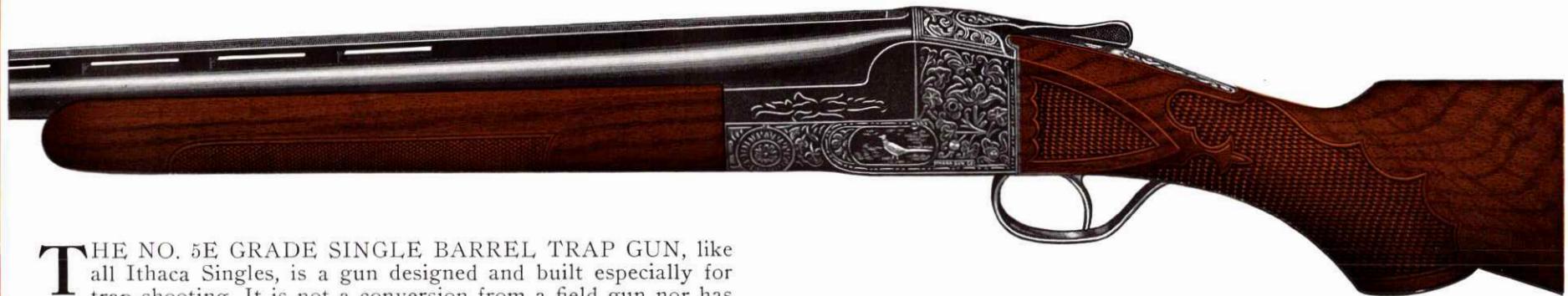
Ithaca RAYBAR® Front Sight and Ivory Rear Sight
and Recoil Pad

Full Pistol Grip, unless otherwise ordered

30 or 32 inch barrel

Twelve gauge only

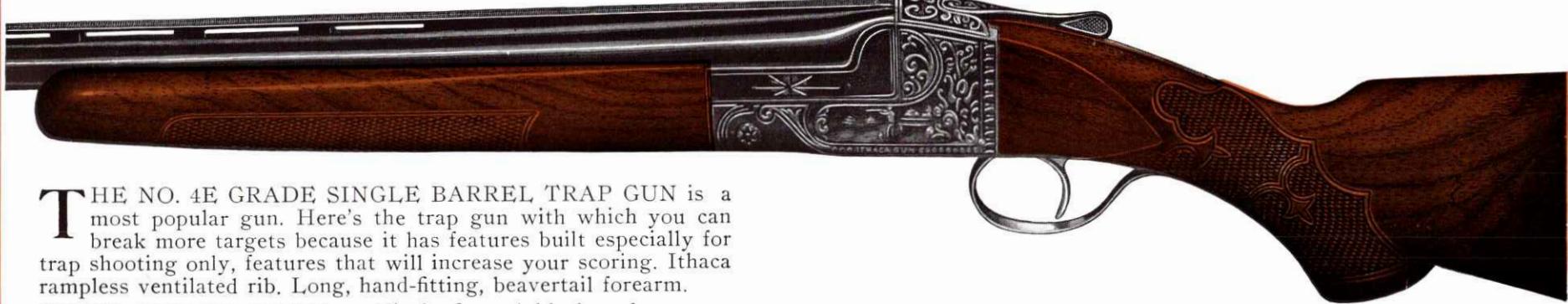
No. 7 Grade, including Excise Tax 1,750.00



THE NO. 5E GRADE SINGLE BARREL TRAP GUN, like all Ithaca Singles, is a gun designed and built especially for trap shooting. It is not a conversion from a field gun nor has it half a double gun lock. Built to be a trap gun, it will improve trap scores for that reason. A beautiful gun, it has a rich look with its gold inlaying.

STOCK AND FOREARM — Extra fine, carefully selected walnut of beautiful figure and coloring, hand checkered in a neat and artistic manner. Ithaca stocks are solid where they join the frame to prevent splitting, checking and spreading.

LOCK — All of our Single Barrel Trap Guns are equipped with the Ithaca Lightning Lock. That's one reason why any man can break more targets with an Ithaca. Ithaca Lock Speed adds from 2% to 5% to your score. Flying targets will not wait for a slow load nor a slow lock. All Ithaca Singles have three lugs and are bolted at two points.



THE NO. 4E GRADE SINGLE BARREL TRAP GUN is a most popular gun. Here's the trap gun with which you can break more targets because it has features built especially for trap shooting only, features that will increase your scoring. Ithaca rampless ventilated rib. Long, hand-fitting, beavertail forearm.

STOCK AND FOREARM — Nicely figured black walnut carefully fitted, handsomely hand checkered, and finished.

LOCK — The No. 4 Ejector is equipped with our lightning lock. The speed, simplicity, smooth working and quick, snappy lock suits the trap shooter because he can break more targets with it. This gun has three lugs and is double bolted. It will stand the continuous strain of trap shooting.

ENGRAVING — Frame, top lever, forearm iron, guard and trigger plate elaborately engraved by hand with beautiful leaf and flower designs; woodcock inlaid in gold on the right side of frame; pheasant inlaid in gold on the left side; American eagle design on trigger plate and a gold name plate in the stock.

Specifications for both Single Trap Guns shown

Ithaca RAYBAR® Front Sight and Ivory Rear Sight and Recoil Pad

Full Pistol Grip, unless otherwise ordered

30 or 32 inch barrel

Twelve gauge only

No. 5 Grade, including Excise Tax 675.00

ENGRAVING — Frame, top lever, guard and trigger plate hand engraved in a beautiful, artistic manner. A trap shooting scene on one side of the frame, an American Indian shooting design on the other side, a hardened and polished trigger and a gold name plate in the stock.

No. 4 Grade, including Excise Tax 525.00

AMAZING ITHACA RAYBAR® FRONT SIGHT!!

The sight used on the \$2500.00 Grade

Ithaca Guns

The Ithaca RAYBAR® Sight has created a whale of a lot of comment in the shooting world. It was developed by the Ithaca Gun Company as part of an overall program to examine and improve the various component parts of a shotgun. In defining the shortcomings of the average shotgun sight as a basis for the research program which led to the Ithaca RAYBAR® Front Sight, such things as the tendency of average sights to lose their silhouette characteristics under certain background conditions were noted. Even colored sights that were on the market (such as ivory sights) were found to blend, on occasion, with certain backgrounds such as clouds, snow, water white caps, etc. The basic fact that the human eye cannot really focus on two objects at vastly different distances, target and gun sight, at the same time was deemed to be one of the cruxes of the overall problem.

After considerable experimentation, it was found that the reason existing sights were not adequate was that they all made use of **reflected** light since they were of an opaque nature. It was felt that a sight making use of **refracted** light would solve this deficiency. As a result, the basic acrylic resin material which is the heart of the Ithaca RAYBAR® Sight was chosen. Machining and treatment of the holding element of the sight adds to the effectiveness of its appearance and use, even under extremely adverse conditions. The extreme brilliance of the sight results in the eye being able to pick it up quickly even while concentrating on the target.

This exclusive Ithaca development offered to shooters gives phenomenal gun pointing ability under ANY outdoor light conditions: dawn, dusk, heavy overcast, rain, fog, dark woods, snow, etc. The scientific light-gathering action, which picks up itinerant, ambient, variant, and errant light rays, shows up as a bright red-orange glowing dot. This gets the shooter on the target much faster and shows him faster when he is not on the target properly. It enables him to judge the proper lead more accurately and with much greater speed. It has startling performance! An average skeet shooter, in the 20 and 21 x 25 class before he tried it, is now in the 24 and 25 x 25 class and says it has added to his scores and shooting ability. That means it **really** works!

In its development the Ithaca RAYBAR® Sight was completely field tested in all rough and tough shooting and hunting conditions. It is ruggedly constructed, built for use and abuse. The two time winner of the World's Championship Pigeon Shoot now uses it and says it improves his shooting. It improves any man's shooting.

This world beating innovation is furnished without extra charge on all new Ithaca Guns. It is available for used guns if the barrel of the gun in question is sent to the factory at Ithaca, New York. The present price is \$7.50 which includes the sight and the complete installation. Sight mailed separately for \$2.50 plus postage if you have gunsmith available for fitting.

QUOTABLES FROM SHOOTING NOTABLES:

"One can find that muzzle instantly. I fired it at trap under some very bad conditions — heat, raw cold winds, etc. While I am no whizz of a trapshot, I was



high gun in three out of four times out. The thing really works. It's much faster than anything I have ever tried." — R. M. Blackman (Gun Expert, hunter, shooting writer)

"Certainly for many shooters who, by reason of their scattergun technique, need to have pretty sharp, if subconscious, impression of the muzzle — those people it will definitely help." — Warren Page (Shooting Editor, Field & Stream Magazine)

"The hunter using one of your RAYBAR® Sights has a decided advantage. I have tried it under all types of lighting conditions and it does everything you claim and more." — K. D. Templeton (Hunting Instructor for Department of Fish and Game, State of California, and National Rifle Association)

"I was delighted with it. The shooter can hardly fail to be cognizant of it every shot. He will be liable to center the shot pattern more precisely on the target. It is much more than just a talking point or selling point. I think it adds greatly to the efficiency of your good Ithaca Guns. I just thought you might like to know what one of the oldest shooters in the country thought of it." — Townsend Whelen (Colonel, U. S. Army, Retired. Arms and shooting expert and consultant)

"The Ithaca RAYBAR® Sight is the finest thing in my opinion that has happened to a scatter gunner.

"I have hunted as much in the past two years as most men do in a lifetime." — J. A. C., Morgantown, N. C.

"I would like to say that I have mounted your RAYBAR® Sight on 3 of my shotguns due to the fact that the use of the first one I had installed convinced me that their use was most practical for me and helped my shooting. My eyesight was affected by a World War II head injury, but the use of this sight has reduced the amount of light that I need to find the gold bead I formerly used."

— D. M. S., Westmont, Ill.

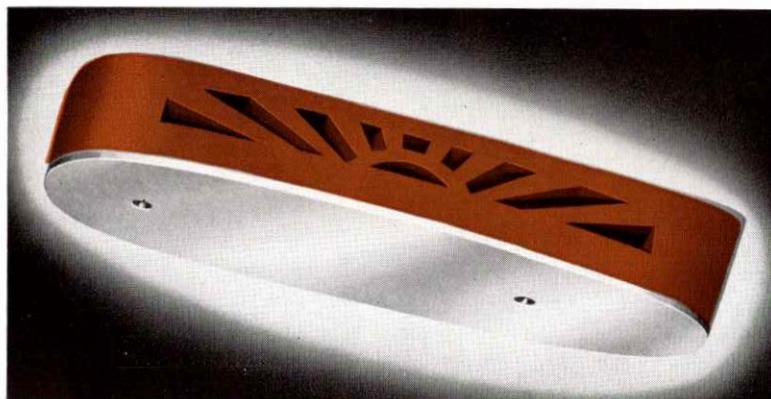
"I have been having wonderful luck killing ducks here in Germany, and most of the shooting is late evening about dusk. However, I lost my Ithaca RAYBAR® Front Sight. Since that day I have not killed a duck, therefore, I am completely sold on the Ithaca RAYBAR® Front Sight. Please send me another immediately."

— Capt. P. A. G., Grafenwoehr, Germany

TABLE OF LEADS

The following are the leads required at various ranges to hit a bird flying at 40 miles per hour at right angles to the line of fire. These leads are computed for a 12 gauge gun, using 3½ dram, 1¼ ounce load. For birds flying at increasingly less angles to the line of fire, increasingly less leads are required. This is, then, merely a basic table to give the reader a starting point for estimating leads.

Target Range in Yards	Lead Required in Feet
10	1.5
20	3.2
30	5.0
35	6.0
40	7.1
50	9.4
60	11.9



ITHACA ALUMINUM BASE RECOIL PAD

Custom-fit your gun with the new Aluminum Base Ithaca Recoil Pad. Shining Aluminum metal stoutly bonded to soft recoil-absorbing rubber adds handsomely to your new gun or old.

Here's the pad used on the \$2,500.00 Grade Ithaca Guns. Recoil-engineered on the plan of a steel bridge, the actual truss-frame support evenly cushions recoil. Arch reinforcement directly backs up the point of greatest strain and gives rugged "stand up" under use and abuse.

Let this Ithaca take the pounding and save your shoulder. Large or medium size. Price only \$3.75 plus postage. Fitted to your gun at factory \$3.75 extra.

Here Are Some Letters Picked At Random From the Ithaca Mailbag, All Unsolicited:

"Am very proud of my weapon, and it has given me very good service here in Alaska. On numerous occasions I have gone duck hunting in sub-zero weather. While crossing lakes my Ithaca has often become wet from water spray, the water freezing on the weapon, but not once has it failed to fire, even with ice on some of its intricate parts."

—Sgt. G. D. S., A.P.O., Seattle, Wash.

"6 Cock Pheasants shot at 6 killed
2 Partridge shot at 2 killed
17 Rabbits shot at 14 killed"

—H. B., Glens Falls, N. Y.

"Cleaning the barrel of my 20 gauge Ithaca FEATHERLIGHT Repeater, I see it has not even started to pit. This surprises me for I have been using it for two years, shooting every week, and every day during hunting season. Just wanted to tell you how pleased I am with it."—D. W., Avon, Conn.

"One of the best buys I ever made. It is well patterned, rugged, dependable, never has failed, and never will. Without a doubt it is the best, and always will be."—J. W. B., Jr., Long Island City, N. Y.

"I have been in gun business for over 60 years, and this is the first Ithaca to come into my shop, that's some recommendation for your gun."—A. T., Gun Repair Shop, Braham, Minn.

"I have a 12 gauge Ithaca FEATHERLIGHT Pump. A great duck gun. Also with buckshot a great deer gun. This one has brought down 17 deer for us. We think Ithaca as fine a gun as can be made."

—F. L. H., Sr., Hartland, Maine

"The best gun I ever raised to my shoulder."

—A. R., Marlow, Okla.

HOW TO KEEP YOUR GUN IN GOOD CONDITION

By Ed Thompson — Manager, Ithaca Gun Co. Service Department

Clean your gun promptly after you are through using it. Don't put off cleaning a gun until the following day because you may find it has started to rust if you do. To clean the inside of your barrels a jointed cleaning rod will do, but a good old fashioned one piece wood cleaning rod is better.

The best setup consists of three pieces of maple or birch dowel stock that you can purchase for about five cents apiece from your building supply dealer. With a small drill bore a series of holes starting about two inches back from the end and extending back an inch or two, then form a slot by filing out the wood between the holes.

One rod should be fitted with clean dry flannel patches, another with flannel patches soaked in a good grade light gun oil and the third fitted with a smaller amount of flannel patches and several 1/4 inch strips of number 320 aluminum oxide cloth. This material is put out by the Minnesota Mining and Manufacturing Company and can be obtained from a mill supply house.

Do not use anything coarser and if you cannot find 320 grit aluminum oxide cloth, use crocus cloth. Both the flannel patches and the aluminum oxide cloth should be well soaked in light gun oil.

Under certain conditions, the inside of a gun barrel will lead, that is, lead from the shot will cling to the inside of the barrel and generally show in streaks just ahead of the shell chamber or near the muzzle.

The combination of oil soaked flannel and aluminum oxide cloth will remove this lead and take all other fouling out of the barrel, after which the barrel should be cleaned with a dry flannel patch and then oiled well with the oiled flannel patch.

A larger flannel patch with some light oil on it should be used to wipe off the outside of the entire gun, not only the metal parts but also the wood parts.

If the gun is going to be stored for some months, one of the heavier gun

greases for this purpose should be used inside the bore and on the outside of the metal parts.

The lockwork in any good grade gun requires a minimum of oil and this should be applied with a "needle" only to the friction points.

Excessive oil inside of the lock of a gun builds up an accumulation of dust and trash in the form of weed hulls and seeds from carrying the gun in the field. All of this trash is apt to be abrasive in nature and may damage the closely fitted parts in the mechanism.

Another reason for not using excessive oil in a gun is that oil is an enemy of wood and more than is necessary can run off the metal parts down into the stock.

To prevent this, all of the writer's guns are stored muzzle down.

An oiler can be made up by putting one of your wife's darning needles down through a cork and the cork used to stopper a small bottle of oil.

By this means you can put exactly the amount of oil you need where you need it. Don't take an oil can and squirt the lockwork full of oil.

Unless you are an expert and have the necessary tools, do not try to remove the stock or lockwork from the frame of a double or single barrel Trap gun because you will be pretty sure to damage the screw heads and you may have trouble putting the gun together in the right way.

Moisture and acid from perspiration as well as certain chemicals used to tan leather are enemies of steel and cause damage from rapid rusting. After your gun is handled, be sure to wipe off the metal parts with an oily pad. Most gun dealers are aware of this hazard and wipe all guns immediately after they are handled. Don't count on bluing to inhibit rusting. Blued steel will rust about as readily as bright steel although it is not noticed as quickly.

PROPER CHOICE OF LOAD IS VERY IMPORTANT

Some of us pay too little attention to the choice of loads most suitable for different types of game shooting. More consideration should be given to the average distances at which various game is shot and our own experience actually pacing shots made by many sportsmen in many states has convinced us that the average first shot at upland game, including quail, woodcock, ruffed grouse, rabbits and even the tough old ringneck pheasant is under 20 yards and for the second shot under 25 yards. We have also learned from years of observation that practically every sportsman over-estimates distance in cover.

The size of game should also be taken into consideration, then select a light, medium or heavy load whichever best suits the case.

There is nothing gained by shooting the heaviest loaded shells at small game found in general upland shooting. In fact the heaviest loads shot in the lighter upland guns produce recoil that is uncomfortable, recoil which will often cause flinching, the result of the fear of punishing recoil, and flinchers do not shoot well.

Our advice is not to shoot the heaviest loads available on such game as does not require the heavy loads, but do use the lighter loads which are less expensive, produce less recoil, fewer bruised shoulders and sore cheeks. Nevertheless, the Ithacas we are building will safely handle the heaviest standard loads put up in shells for which the gun is chambered.

It is dangerous to use ANY present day loads in the old time "Damascus" or "Twist" type steel barrels of any gun, regardless of make.

We recommend the following loads:

Suitable Shot Sizes to Use on Game		
Duck (Pass Shooting)	4, 5 and 6	Heavy Loads
Duck (Decoy Shooting)	5, 6 and 7½	Medium Loads
Goose	2 and 4	Heavy Loads
Grouse	7½ and 8	Medium Loads
Pheasant	6	Medium Loads
Quail	8 and 9	Light Loads
Dove	7½ and 8	Medium Loads
Snipe	9	Light Loads
Woodcock	9	Light Loads
Fox	2	Heavy Loads
Wild Turkey	2	Heavy Loads
Squirrel	6	Medium Loads
Rabbit	6, 7½ and 8	Light Loads
Deer	0 Buckshot or Rifled Slug Load	
Prairie Chicken	6 and 7½	Medium Loads
Trap Shooting	7½ and 8	Medium Loads
Skeet Shooting	9	Light Loads

HOW TO KEEP YOUR HOUND HAPPY

We keep our own hunting dogs free from fleas by bathing them in warm water into which a good big handful of lime-sulphur has been thrown. Be sure every part of the dog is thoroughly soaked with the lime-sulphur solution, then turn the dog loose without rinsing the lime-sulphur off. A weekly bath during warm weather and a bath once in two weeks during the colder weather works well for us. This same treatment has always cured or prevented ordinary mange for our dogs, but it will not cure so-called red mange; neither will any other treatment that we know of. Lime-sulphur is inexpensive and may be purchased at most paint stores or stores selling orchard spraying supplies.

You can toughen the pads on your dog's paws by dipping each paw momentarily, three times daily, before and during the hunting season, in a small jar one-third full of the following lotion; $\frac{1}{2}$ oz. chloral hydrate, $\frac{1}{2}$ oz. salicylate acid, 2 oz. tannic acid, 4 oz. glycerine, and 1 qt. bathing alcohol.

Condition is the difference between a "stayer" and a "quitter" in the fields or woods. A few minutes' care in the field and at home will go a long way to keep your dog in good condition. When the hunt is over blanket your dog for the chilly ride home. When you reach home give your dog a brisk rub with a rough towel and then a little warm food. Don't risk washing a dog in water during cold weather. Use rubbing alcohol or a good cleaning job can be done with corn meal to which a few drops of cedar oil has been added. See that your dog has a warm bed of clean straw in a kennel out of the wind. Your dog, like an army, travels on its stomach, so see that hard hunted hunting dogs have two feeds a day.

THE TEN COMMANDMENTS OF SAFETY

Published in the Interest of Making and Keeping Shooting a Safe Sport

As Recommended by

The Sporting Arms and Ammunition Manufacturers' Institute

1. Treat every gun with the respect due a loaded gun. This is the first rule of gun safety.
2. Guns carried into camp or home, or when otherwise not in use, must always be unloaded, and taken down or have actions open; guns always should be carried in cases to the shooting area.
3. Always be sure barrel and action are clear of obstructions, and that you have only ammunition of the proper size for the gun you are carrying. Remove oil and grease from chamber before firing.
4. Always carry your gun so that you can control the direction of the muzzle, even if you stumble; keep the safety on until you are ready to shoot.
5. Be sure of your target before you pull the trigger; know the identifying features of the game you intend to hunt.
6. Never point a gun at anything you do not want to shoot; avoid all horseplay while handling a gun.
7. Unattended guns should be unloaded; guns and ammunition should be stored separately beyond reach of children and careless adults.
8. Never climb a tree or fence or jump a ditch with a loaded gun; never pull a gun toward you by the muzzle.
9. Never shoot a bullet at a flat, hard surface or the surface of water; when at target practice, be sure your backstop is adequate.
10. Avoid alcoholic drinks before or during shooting.

First, last and always, treat your gun as if it were loaded, even when you feel sure it is empty. Keep it empty except when you are ready to shoot. Do this whether the gun is in your hands or in a car. At home, be sure to keep it empty and out of the reach of small children.

Whether your gun is empty or loaded, always keep the muzzle pointed away from anything you don't want to shoot. No real sportsman will ever point any empty gun at another person, or wrestle or engage in horseplay with anyone holding a gun.

Before you pull the trigger, know what your target is. Never shoot at something you do not see.

Remember that shot may glance off at an angle from hard surfaces, twigs or water.

"SAFETY FIRST — ALWAYS"

Make That Your Motto

TIPS ON SHOOTING

Most scattergun fans learned to shoot the hard way. In many cases bulldog grit kept them at it until accomplished enough to make the sport interesting and enjoyable.

As a rule the "Old Man" gave the boy a man-sized gun with loads too heavy for his age, instructing him to "hold 'er tight to your shoulder." The first shot set the boy back physically and mentally. His shoulder and face really hurt for some time. His subconscious mind never entirely forgot the jolt which followed pulling the trigger. From then on this deep-seated memory of that terrific jolt

caused him to shut both eyes and pull away from the gun. This needless handicap made it very difficult for the boy to learn to shoot.

Many people give up shooting for lack of proper start-off instruction. It is hoped that the following will help those wishing to enjoy the American outdoor sport, shotgun shooting.

Guns are dangerous if not handled properly, so let's eliminate the danger angle first. The following should be done EVERY TIME A GUN IS PICKED UP, with NO EXCEPTIONS and NO EXCUSES.

- A. With the left hand, take the gun by the forend as shown in Figure 1, keeping the muzzle end pointed UP and AWAY from people, animals, houses, automobiles and other destructible property.
- B. Open the action and make SURE that there are:
 1. No loaded rounds in the chamber (rear end of barrel) or magazine.
 2. No obstructions such as old cleaning rags, chunks of dirt, heavy grease, ice, etc., in the barrels.
- C. Close the action gently but firmly. Slamming the action

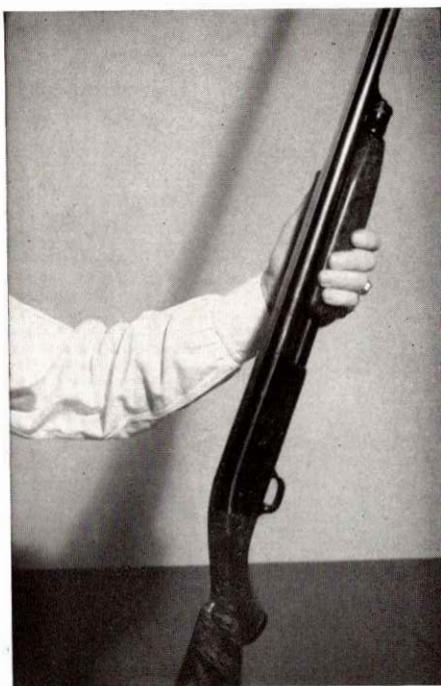


Figure 1

- D. Shut proves nothing and in time causes unnecessary wear.
- E. Keep your fingers off the trigger. Don't develop the habit of snapping the trigger when you inspect a gun. Trigger-snapping is a very bad and dangerous practice. Graveyards hold ample proof of this statement. DON'T DO IT.
- F. Don't point the gun at anyone or at anything you do not intend to shoot. If you wish to aim at something, pick out a distant object (over 100 yards distance) not in line with or in the vicinity of people or valuable property.
- G. In handling the gun, NEVER SWING the business end of it past anyone. Always move the gun from one direction to another by raising it high enough to clear or by pointing it down enough to miss a person. In general, pointing the gun up is better than pointing it down. Shot will ricochet off floors, stones, etc. If the gun should go off while pointed down, there is

always a chance of shooting someone in the foot or leg. There is seldom anything above which would be hurt if the gun should be fired accidentally while pointed up.

- H. When putting the gun down or putting it away, the inspection process in A, B, and C should be observed. Always stand the gun in a gun rack, hang it up or lay it down, don't stand it against a wall, shelf, automobile, etc., as it is apt to fall down. Many good guns are put out of commission by such carelessness.
- I. Always use proper ammunition in your gun. Don't use ammunition for which your gun is not designed, such as a shell longer than the chamber—examples: 10 ga. - 3 1/2" shell in 2 7/8" chamber, 12 ga. 3" shell in 2 3/4" chamber. Don't carry 20 gauge shells with you when shooting a 12 gauge gun. A 20 gauge shell will go in the chamber of a 12 gauge gun. If a 12 gauge shell is inserted behind this 20 and fired, the gun will usually burst with possible injury to the shooter.

PLACING THE GUN ON THE SHOULDER

(Instructions for right shoulder shooters. Reverse for left shoulder)

1. Pick up the gun, inspecting it as outlined above.
2. Pick out an aiming target as set out in E.
3. Adjust feet in standing position as follows: (see figure #2) Left foot pointed a little to the right of your target (from 15-30 degrees). Right foot 12 to 18 inches to the rear, and pointing 10 to 20 degrees farther to the right than the left foot.



Figure 2

4. Stand in a normal, alert, semi-relaxed position leaning forward just a little, with head up and eyes on the proposed target (see figure #3).

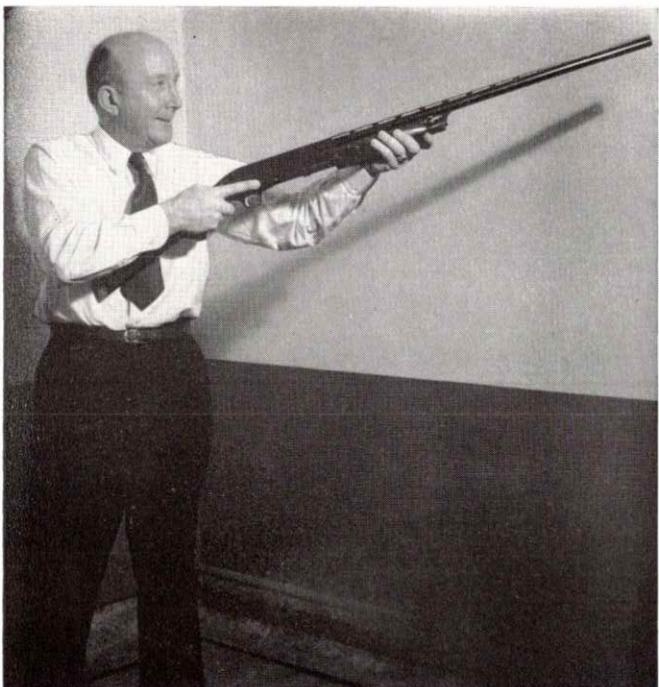


Figure 3

is the most common fault of beginners. Learn to do it as shown in figure #4. It will save much learning time and many a sore shoulder.

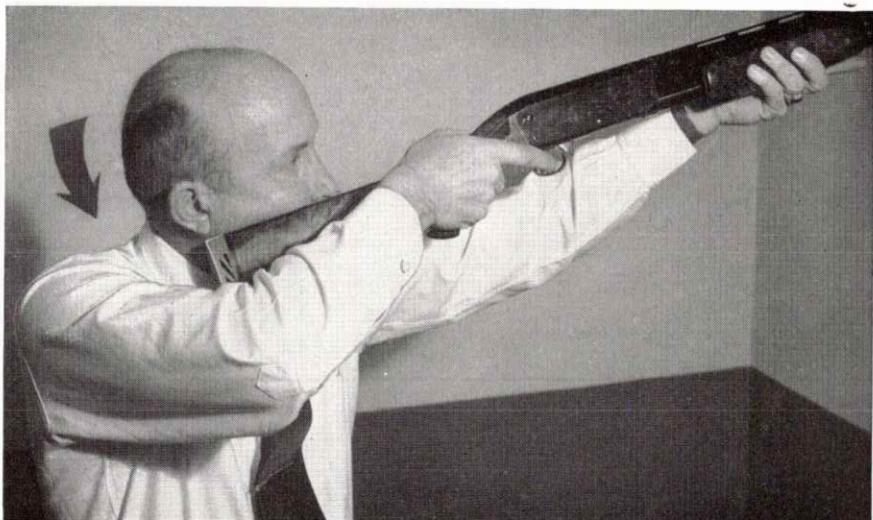


Figure 4

8. The head, arms and shoulders should move smoothly as one unit attached to the gun. If you move them together, your eyes will always be looking where the gun will shoot. The head and gun must be moved together. If you move one without the other the shot will not go where you are looking. **DON'T MOVE ONE WITHOUT THE OTHER.**

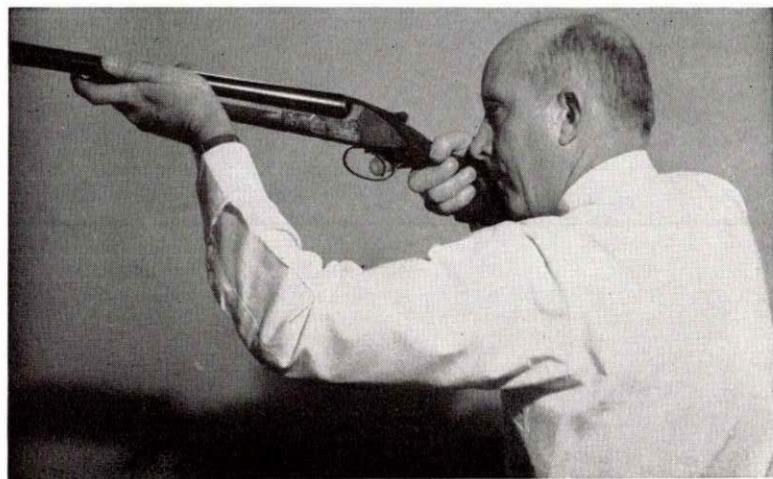


Figure 5

5. Raise the gun so that your right eye (both eyes open) is looking down the sighting plane at the target; and so that the comb of the stock is resting gently against your right cheek. The butt plate should be about 2" in front of your shoulder as in Figure #4. Raise the right elbow slightly, making a better pocket on the shoulder for the butt plate.
6. Keeping the comb against the cheek and keeping the sight lined up between your right eye and the target, move the gun back so the butt plate rests on the shoulder, not hard, just enough so that it is steady and firm. Too much pressure will cause bruising when the gun is fired. Keep the stock pushed in as close to the neck as possible. Resting it on the tip of the shoulder or on the arm will result in a bruised shoulder or arm. The gun should be held **FIRMLY** in **BOTH HANDS** so that some of the recoil is taken up by the hands and arms. The left arm is used to steady and support the muzzle of the gun and to absorb some of the recoil. The left hand should be placed under the forend at a comfortable distance from the shoulder (figure #5). Too far out (figure #6) tends to cause slow swing and fatigue. Too close in (figure #7) makes for a fast but unsteady swing. The right hand should grip the stock firmly enough to insure complete control at all times. The right hand should be used to keep the stock against the side of the face and against the shoulder, to absorb some of the recoil.
7. Don't put the gun to your shoulder and then put your head to the gun. This

- Learning to shoot a scattergun by this process may seem complicated, but it's fundamental. Getting the proper position or stance, properly placing the gun first to the FACE then to the SHOULDER, the correct alignment of sights and moving the head and gun together, CANNOT be emphasized too strongly. Practice this routine every time you get your hands on a gun. When you think that you have become proficient at this, try the following check:

Stand about six feet in front of a mirror. Using your reflected right eye as a target, throw the gun to your FACE then to your SHOULDER. When

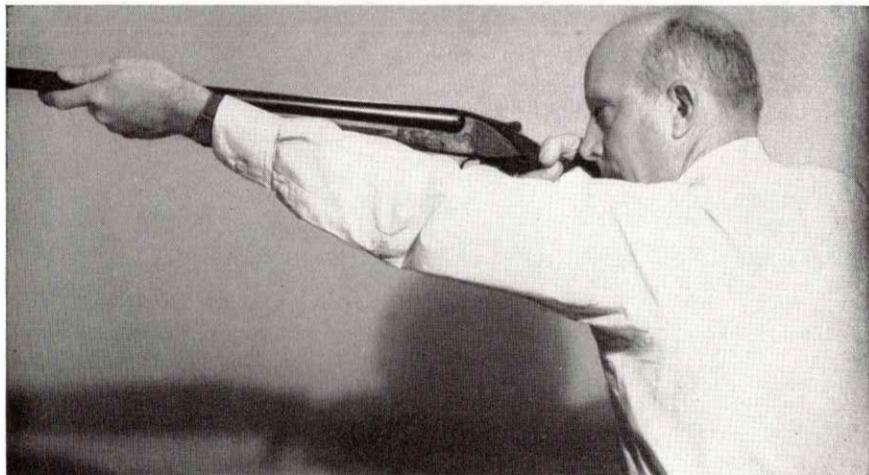


Figure 6

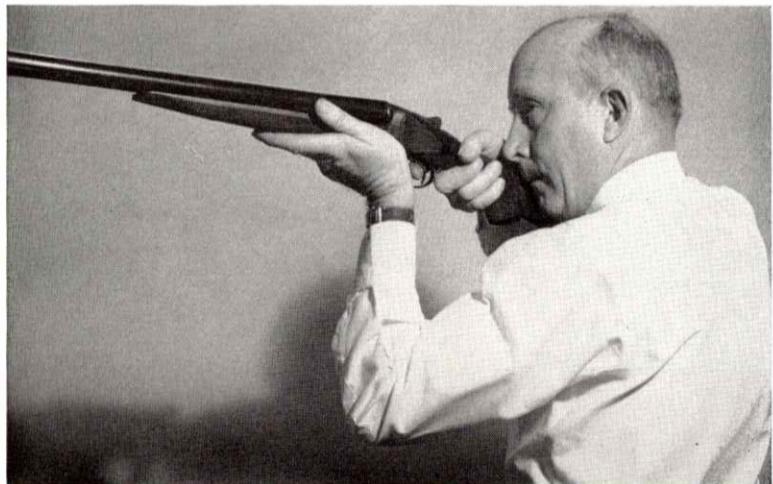


Figure 7

you get real good, shut both eyes while the gun is coming up. Open your eyes as soon as the butt plate touches your shoulder. When you are consistently able to put the line of sight in a 4" circle centered on your reflected eye, you are ready to start shooting.

SHOOTING

To hit a moving target is a simple matter after you have mastered the foregoing technique. We believe the following to be a good guide for most people:

- Determine which way your target is moving.
- Throw the loaded gun to your FACE and SHOULDER, swinging in the direction your target is traveling. KEEPING YOUR EYES on the target, swing the gun ahead of it and fire. We recommend coming up from behind the target and passing on through it to get the proper amount of lead. For example: if your target left a smoke trail behind, your line of sight, as you approach the target, would follow up this smoke trail until it came to the target. Assuming that the target was going to continue in the same direction, continue to swing ahead in the extension of this smoke line until you reach the point where the shot and the target would cross at the same time. You can miss a target in any of four general directions: OVER, UNDER, AHEAD or BEHIND. The smoke follow-up system eliminates two of them, OVER and UNDER. All you have to worry about is the lead.
- Lead—You will learn to lead correctly very quickly if you make sure your eyes are WIDE open when the gun is fired. You cannot see what goes on when your eyes are closed. You will learn much by getting a mental picture of what you and your gun did on the shot, whether it was right or wrong.

You would have no difficulty hitting a fly with a fly swatter if the fly would sit still while you swatted, or if you knew in what direction he was going to take-off. The first thing to do is to determine in which direction you should lead. The amount of lead depends on how fast he flies and how quickly you swat. The two, fly and swatter, must arrive at the same place simultaneously in order to get a kill. Shotgun shooting is the same thing with slight variations. If the fly is going to the right, you know you must lead to the right. What you do not know is just how far ahead of him to swat. For the first try, aim the left edge of the swatter at the spot where he is sitting. If he doesn't travel too fast during the swat, he is a dead fly somewhere under the swatter. If he flies a little faster, and you have your eyes open you will see him flying out from under the swatter. Then you would say you did not lead enough, that you "shot" behind. The next time try two widths of the swatter, and so on until either you connect or the fly gets tired of this rough game.

Lead with a shotgun is much the same. Let's take a 12 gauge full choke shotgun pattern at 40 yards. The killing pattern is about 30" in diameter. It differs from the fly swatter in that it changes size. It starts out about $\frac{3}{4}$ of an inch in diameter at the end of the gun barrel and expands as it goes. At ten yards it is $7\frac{1}{2}$ ", 20 yards 15", 30 yards $23\frac{1}{2}$ " and at 40 yards 30". You can see that you have a smaller pattern when shooting at close targets and a larger pattern when shooting at more distant ones. Few people estimate size accurately at a distance of over 20 yards. If you don't believe it, cut a stick about $4\frac{1}{2}$ " long and have several people guess how long it is when placed 30 yards away against a background that does not contain objects with definite scale or size, such as bricks, windows, etc. When shooting you have a fraction of a second to make up your mind, so in this test be generous; allow them 3 to 5 seconds to look and guess. Distance and speed are equally very difficult to estimate accurately in a very few seconds.

An object close by looks large while the same object at a greater distance looks small. Take the railroad track. It is wide where you are standing and seems to run together in the distance at what is known as the disappearing point. It is evident that this optical shrinking in size off-sets, to a large extent, the expansion of your shot pattern as far as visual measurements go.

Considering the above, you realize that an accurate solution to the problem of lead would take quite some time, even if you had the technical knowledge to solve the problem. Let's get back to the fly swatter system of lead and apply it to shotgun shooting. Visualize your pattern-spread at any given distance. If you can visualize this killing-pattern area and get it firmly fixed in your mind, you will be one long step nearer to becoming a good wing shot. This mental picture will help in estimating WHERE, in space ahead of your target, your shot must go in order to arrive at a certain place at the same time the target does.

The only moving targets that take no lead are those that are moving straight at or straight away from your eye. If your target gets off the ground at your feet and flies straight away from you going over the top of a 10 foot hedge at 25 yards, he appears to be a no-lead shot, which is wrong. He is climbing or going up. If you shoot straight at him, he will have moved up enough, while the charge of shot is getting there, to allow your pattern to miss by passing underneath. Your shot went where the bird was. You want the shot to go where he is. Remember this: there are few shots that take no lead.

Learning lead so that it can be used instantly under many different conditions and circumstances takes much intelligent practice. A good rule to follow when in doubt was given by an old Nebraska market hunter years ago: "Get what you think to be the correct lead, double it, and pull the trigger." It works more times than not.

Always estimate your lead from the front edge of the target. Don't get in the habit of leading from the middle; some birds are half tail feathers.

Still another fact affects your visualized lead. This is the speed with which you over-take the target. There are three general ways of pointing out the target, although there are many degrees of difference and variation between each way.

First—Swing and over-take very rapidly (snap shooting). Very little lead is noticeable because the gun muzzle is traveling so fast. The shooter starts to pull the trigger as he is passing through the target, and by the time the shot leaves the barrel the required lead has been reached. This system is extremely difficult and is not recommended for beginners.

Second—Over-take the target, apply your mentally calculated lead (slowing your swing so that the muzzle is keeping the proper lead distance ahead of the target), and fire as soon as that lead has been found. This is what we call "pointing 'em out," and is highly recommended for young and old alike.

Third—Swing way past your target, stop, and pull the trigger, allowing the target to catch up while you are pulling it. This method is the one to use if you wish to be a V. P. S. (very poor shot). We know of nothing worse. DON'T STOP YOUR SWING AT ANY TIME — ALWAYS FOLLOW THROUGH.

A shotgun trigger is pulled, not squeezed and not jerked. You must have perfect timing without pulling the gun off its intended line of travel. In rifle and pistol shooting you hold as near the exact spot as you can and then squeeze the trigger. Holding steady throughout the operation is more important than the time at which the trigger lets go. In shotgun shooting the hold is approximate. Because of the large killing pattern and the fast movement, the timing of the shot is more important than the exact pin-pointing of your aim.

Speed of the target also affects the amount of lead. Speed is hard to judge right down to a fine feather, and a good rule of thumb should suffice. The following is for 90° cross shots and can be cut in half for 45° shots and that cut in half again for 22½° shots.

1. A crow flying leisurely against a strong wind takes a small lead (a half pattern width).
2. A duck, pheasant, partridge, quail, etc., flying in quiet air (no wind) takes a lead of from 4 to 5½ pattern widths.
3. A duck which has been shot at, traveling downwind with a good strong wind, takes approximately 6 to 9 pattern widths.

JUDGING DISTANCE

Ability to judge distance must be developed. We suggest that you measure off three distances out in a brush lot and get a first hand idea of actual measured distances. Lay off 40-50-60 yards. Any fair-minded person who has shot a lot will agree that 40 measured yards is a long shot, 50 measured yards is a real long shot and 60 yards is a whale of a long shot. Anything over 60 yards is more luck than consistent good shooting. In attempting shots over 60 yards, you will cripple more game than you kill. In practically all upland game shooting, the first shot is about twenty yards, the second about 25 yards. Ducks over decoys will average about 35 yards.

We recommend that you confine your shooting to short distances. Get so that you can kill your game cleanly at short range before you try any long range shots. Every time you kill your game cleanly, it improves your confidence and the pleasure of having done the job well. Misses cause confusion and too much missing, regardless of distance, will disturb your confidence and hinder your progress. Keep within the limits of your gun, ammunition, and your shooting ability.

MORE FROM THE ITHACA MAILBAG

What they say about the 'new' .22 ITHACA X-5 LIGHTNING . . .

"Found it a very good shooting and perfect functioning rifle of good shape, dimensions and balance. It certainly handles and shoots nice. We had no single malfunction and it was a cold, nasty day. Groups were excellent for the sights at 50 yards."

—Elmer Keith (Gun Editor & Writer), Salmon, Idaho

"Frankly, I am very favorably impressed with this new Ithaca. It has good weight, perfect balance, swings fast, points naturally and has an excellent trigger pull. You will have to keep the machines busy to meet the demand."

Willis O. C. Ellis (Gun Editor & Writer),
Washington Court House, Ohio

"It is a fine rifle and very accurate. There isn't a fault that can be mentioned. It has the famous Ithaca qualities in its entire construction, action, accuracy of fire and manipulation, also its finish. It carries neatly, and it fits and balances for easy hunting travel, and has a natural sighting reflex. It has something a lot of rifle makers have not been producing."

Ben C. Robinson (Outdoor Writer), Newcomerstown, Ohio

"I find I can hit flying objects with your rifle better than any I have ever used. It is really a whiz on objects tossed into the air! I was much impressed. I think the stock not only fits for this kind of game, but I give a lot of credit to the RAYBAR® Sight for my successes. It shows up like a street light that sight!"

Charles Askins (Gun Editor), Ft. Sam Houston, Texas

"Man, that .22 rifle is a whang-dilly! Actually, it is the best shooting .22 rifle I ever had in my hands. I broke the first four bottles I aimed at, and my son broke seven straight at 50 yards — believe it or not! They were small bottles too! I can't say enough for the sweet handling qualities and the accuracy of this little gun."

J. A. Small (Publisher, Western Publications), Austin 31, Texas

"The X-5 mechanism is very fast and I can empty it completely before the first hull hits the ground."

Albert Kerber (Camp Fire Club of America; Marbletown Gun Club;
VLY Gun Club; NRA; Kirby Rifle Club)

"The X-5 .22 rifle is a dandy, substantially better than any of the semi-automatics I've given a workout. I love the interchangeability of the Ithaca RAYBAR® front sight. It is a fine improvement in so-called 'iron sights.'"

Bert Popowski (Outdoor Writer), Custer, S. Dak.

"I have owned many types of .22 cal rifles since I was a lad; and of all the old 22's that I have owned; or all of the models which are on the market this date, I can truthfully say that your new X-5 Lightning is a 'Man's Gun.'

"It may not be in color; and it may not have the lightest weight; and it may not cost as much as some other makes. But, by 'yumpin-yimmeney' it has style! The weight is just right. Even my wife says it is not overly heavy. The stock is a beauty. Congratulations on your new rifle. May you sell a million of them."

Victor S. Petterson, Tampa 4, Florida

"My congratulations to you on an excellent job. This rifle handled as well as any .22 I have ever shot, and in my job as outdoor editor of the American Statesman and Texas editor of Southern Outdoors Magazine I have had the opportunity to try just about every new gun that hits the market. Again let me compliment you on the job well done. As you say, it is 'the first .22 worthy of the name Ithaca'."

Russell Tinsley (Writer & Outdoor Editor), Austin 31, Texas

"I will say that from the first shot fired in the rifle, I haven't experienced one single jam or other type of malfunction. For an auto-loader, this is really something worth noting. The new Ithaca also features the RAYBAR® front sight which was developed by Ithaca. From the shooters-eye view, the sight is pyramid shaped, coming to a sharp edge. I've always thought this was an ideal shape for an open hunting sight."

Pete Brown (Gun Expert and Gun & Ammo Writer)
Sports Afield Magazine

"I have handled and shot a lot of .22 rifles in my time, but I can truthfully say that the Ithaca X-5 "Lightning" auto-loader is one of the fastest handling, smoothest working, best shooting .22s that I have ever personally had any dealings with."

Carlos Vinson (Well-known Outdoor Writer and Gun Authority)
Daylight, Tennessee

"I think the X-5 Lightning is one of the best .22s on the market. I just bought a scope for it and the X-5 is deadly, even the first time I took it hunting I got my limit of rabbits with the Ithaca RAYBAR® sight. I also shoot an Ithaca 37 Deluxe."

Gilbert Cook, Wisconsin Rapids, Wisc.

**SHOOTERS — EDITORS — WRITERS — GUNSMITHS . . . all acclaim the
"Ithaca X-5 Lightning" as tops in quality and the King of the .22's!**

What they say about the ITHACA SHOTGUNS . . .

"These birds (eight fine cock pheasants) were shot on a day when the temperature was about 5° below Zero. This gun has been a fine piece of hunting equipment, having served in all the most severe weather conditions. It has yet to let me down the first time."

J. P., Medicine Hat, Alberta, Canada

"I think the Ithaca Gun is the best shotgun in the World. I have hunted 25 years and have not found any gun that I think is as good as the Ithaca. I killed a 285 lb. Black Bear with my Ithaca last November. Only two shots got him."

S. M. H., Jr., Bland, Virginia

"I have shot Ithaca Guns since 1914 and never had one that malfunctioned or caused trouble in any way. Being a 'General Motors' man I want to say I think Ithaca Guns are the 'Cadillacs' of the gun industry."

R. H., Rochester, New York

"I have been shooting my Ithaca for 38 years and never had a bit of trouble."

J. A. G., Philadelphia, Pennsylvania

"I have recently returned home after traveling around 1700 miles in interior and Arctic Alaska . . . Traveling was done by plane, car, river boat, dog team and back packing. The game that I collected with my Ithaca were Ptarmigan, Ducks, Geese, Willow Grouse, 1 Caribou shot in the neck with a rifled slug at 70 yards, 1 Wolf killed with No. 2 shot at about 40 yards, and last, but not least, a large Moose shot by one of my partners . . . The Model 37 Ithaca cannot be beaten. Rain, snow, sleet and extremely low temperatures, 30 to 40 below Zero, was a common occurrence, yet the gun worked perfectly. My partners' guns (not Ithacas) became unserviceable many times and would have to be thawed to work. They got cussed out aplenty, and that is how the Ithaca came to kill the Moose. You people build a fine gun well built of machined steel and one that can be relied upon to deliver the goods. I have no use for guns built from stamped and extruded metal parts. I am going to want one of your Model 37T Repeaters."

O. O. K., Danville, Pennsylvania

Very rare picture of Quail in their customary night roost. Photo by Jack A. Stanford, Biologist of the Missouri Conservation Commission, an Ithaca Featherlight Repeater user who has carried his Featherlight many a mile in his Quail studies. Five years were spent in attempting to get this photo.



A furry jet-streak! American Red Fox traveling at terrific speed (taken by high-speed strobe flash). The Red Fox has been reported checked by car speedometer at 45 M.P.H.—but he's in the bag, because you can get into action quicker with an Ithaca FEATHERLIGHT Repeater!

